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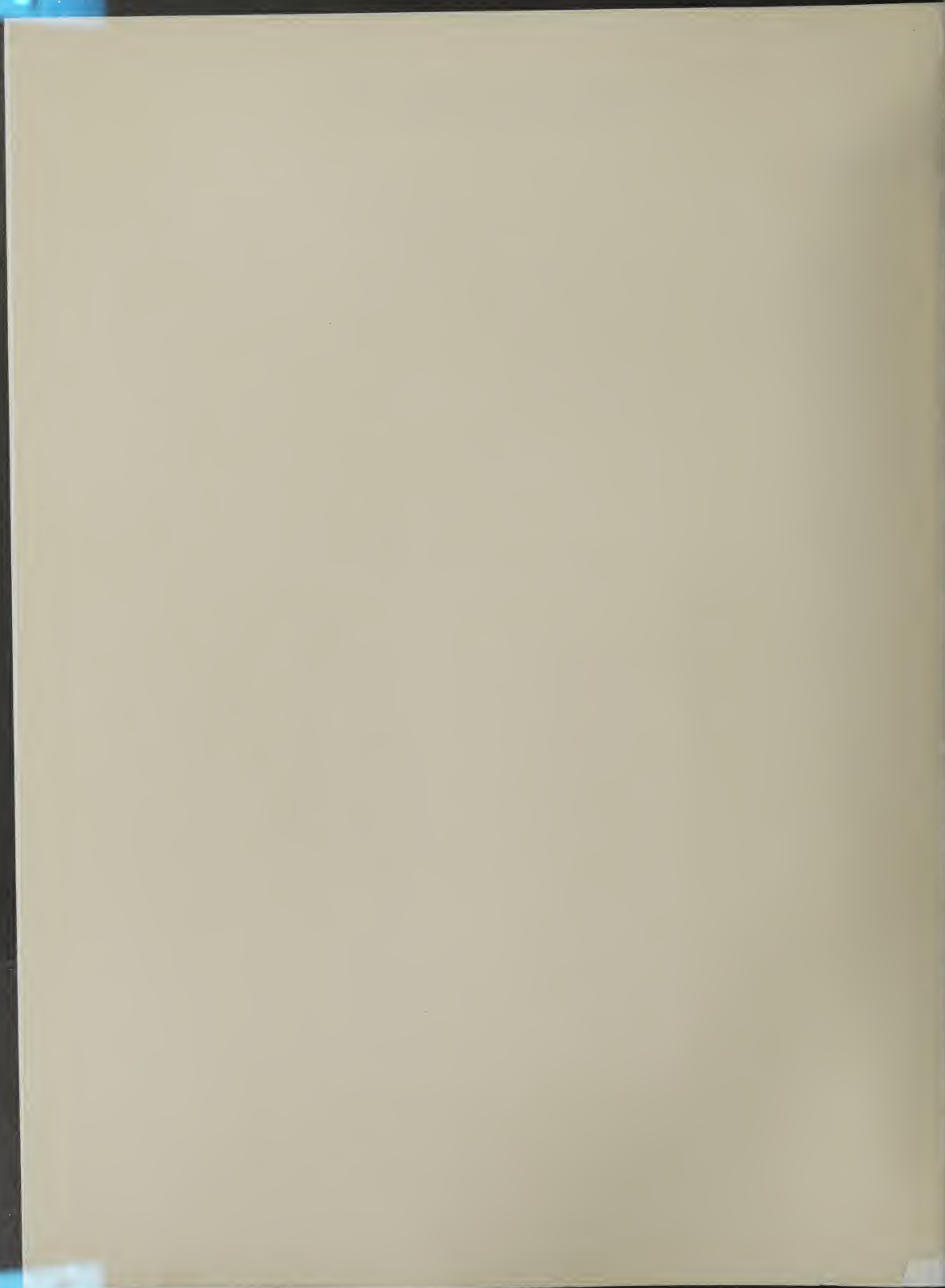


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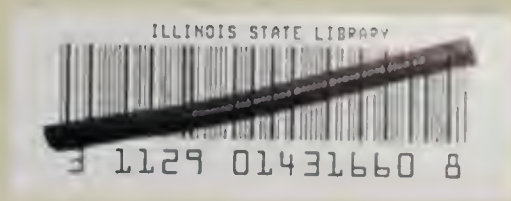
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A HIGHWAY PLAN  
for  
THE ILLINOIS PORTION  
of the  
ST. LOUIS METROPOLITAN AREA

PREPARED FOR

THE STATE OF ILLINOIS

DEPARTMENT OF PUBLIC WORKS AND BUILDINGS

DIVISION OF HIGHWAYS

AND THE

BI-STATE DEVELOPMENT AGENCY

IN COOPERATION WITH THE

UNITED STATES DEPARTMENT OF COMMERCE

BUREAU OF PUBLIC ROADS

BY

H. W. LOCHNER & COMPANY

CHICAGO, ILLINOIS

OCTOBER, 1951

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October 15, 1951

Mr. Charles P. Casey, Director  
Department of Public Works and  
Buildings  
Division of Highways  
Springfield, Illinois

Dear Mr. Casey:

We are pleased to submit herewith a highway plan for the Illinois portion of the St. Louis metropolitan area prepared in compliance with your directions of April 23, 1951. The plan as prepared calls for the development of a system of highways and streets to accommodate traffic demands in the region during the next twenty year period of time. The traffic analysis and estimates of river crossings which we prepared were verified by the Missouri State Highway Department and the plan of new river crossings has been coordinated with the tentative highway plan as now developed for the city of St. Louis.

The plan has been prepared without regard to individual obligations or jurisdictions of the several road building agencies in the region. It is our sincere hope that the plan as herewith presented will serve as the basis in the development of the proposed system through the cooperative efforts of the several cities, the counties and the State of Illinois.

In the course of preparing the study we received the very hearty and complete cooperation of the officials of all of the agencies involved and particularly those of the Bi-State Development Agency and your Department. To these persons and the many other individuals from whom we received assistance, we wish to express our appreciation.

Yours truly,

*H. W. Lochner*

H. W. LOCHNER & COMPANY

HVL:mm







## *Summary of Report*

### The Area and Methods of Study

The Illinois portion of the St. Louis metropolitan area is a region of intense vehicular activity. Because many of the functional activities of the entire St. Louis area are located east of the Mississippi River, traffic activity far exceeds the amount normal to the population within the region.

This study has concerned itself with the urban highway problems for Madison, St. Clair and Monroe Counties, with particular attention to the region lying east of the Mississippi River, including Alton on the north, Edwardsville and Belleville on the east and Columbia on the south. The factual data utilized were obtained by the Division of Highways of the State of Illinois through an origin-destination traffic survey made in 1948, supplemented by current data. Through an analysis of the traffic data, and a review of pertinent trends, anticipated patterns of land usage and traffic flows were developed, which estimates served as the basis in determining the highway needs of the region for the coming twenty years. Based upon the anticipated development of the region, highway demands will increase as much as two and one-half times over today's in certain areas with an overall increase for the region of nearly fifty per cent. Many of the principal highways in the region are today inadequate and in need of replacement and rehabilitation. The expenditure of a large amount of money to remedy existing conditions and to meet future demands is essential.

### THE PRIMARY HIGHWAY SYSTEM

The primary highway system for the region is the network of major traffic carriers connecting that region with the outside and also those carriers within the region which connect the principle areas of activity. It should not be confused with the Primary Highway System of the State of Illinois.

#### U. S. Route 66

One of the primary highways of the region is U. S. 66 which today is inadequate and should be relocated and reconstructed. The relocation should provide a by-pass around Edwardsville and entry into the East St. Louis area over a new right-of-way lying generally to the north of and parallel to the existing U. S. Route 40. The service provided by the existing city extension of U. S. 66 in East St. Louis is poor and this section should be replaced by an urban Freeway connecting to the Veterans Memorial Bridge, which section should be the first to be undertaken.

#### U. S. Route 40

The existing Route 40 in East St. Louis is wholly inadequate and in need of replacement. Adequate service can be provided for U. S. 40 by merging its route with the proposed new U. S. 66 west of Troy and permitting its traffic to utilize that high type facility as its entrance to the East St. Louis and St. Louis area.



#### 8th, 9th and 10th Streets in East St. Louis

These streets are the urban extensions of several of the primary highways in the region. They serve as the approaches to the MacArthur Bridge and function as a major cross-town artery. Several important improvements are recommended to add to their capacities and service to traffic.

#### U. S. Route 50

The urban extension of U. S. 50 through East St. Louis is inadequate to accommodate the anticipated traffic demands and is in need of modernization. A freeway for this section was found to not be justified. A pair of one-way streets utilizing St. Clair and Baugh Avenue was found to be adequate and justified for meeting the future requirements. This improvement, together with the elimination of railroad grade crossings along the route and the acquisition of access rights in the rural areas will develop this highway in an adequate manner.

#### Illinois Route 15

Illinois 15, connecting East St. Louis and the Belleville area, was likewise found to lack sufficient capacity for the accommodation of its future traffic volumes. Improvement of the existing alignment was found to be too costly and diversionary routings are recommended as a more practicable alternative. The diversion routes are the connection between Swansea and U. S. 50, and an extended U. S. 460 with proper connections to Belleville.

#### U. S. Route 460

To serve the large volumes moving between Belleville and the East St. Louis and St. Louis area, U. S. 460 should be extended to and around Belleville upon a roadway of high calibre. This routing should offer controlled access and should be grade separated at its important highway intersections. The current high type section of 460 leading to Alorton will be sufficient for the future volumes, but to forestall congestion, the access rights of its abutting property should be secured.

#### Illinois Route 3

Illinois 3, to the south of East St. Louis, while carrying volumes of traffic not comparable to those on the other principle highways in the region, is in need of relocation between Cahokia and Dupont, with the north section of the new highway requiring four lanes of pavement.

#### U. S. Route 67

In the Alton area U. S. 67 will be incapable of serving the increases in traffic volumes anticipated in the twenty year period. A relief route will be required and such should be developed between the existing location and the river. The proposed rerouting of Alt. U. S. 67 to the west of Wood River is a necessary project and should be carried to completion without delay. Alt. U. S. 67 south of Hartford to Granite City appears to be capable of accommodating the traffic increases anticipated in the twenty year period.



The urban routing of Alt. U. S. 67 through Granite City is inadequate to the through and local traffic movements. A by-pass to the north and east of that city is needed, connecting Alt. U. S. 67 to Edwardsville Road. South of Granite City, the existing alignment of Alt. U. S. 67 is circuitous and hazardous. A new four lane highway should be constructed and connected to the proposed freeway near East St. Louis.

### PRIMARY SYSTEM IMPROVEMENT PROGRAM

The program of improvements to the primary highway system of the region involves a total expenditure for the twenty year period of approximately 44 million dollars. The program has been divided into three phases, based upon the priority of improvement of each project and upon the anticipated highway funds.

### MISSISSIPPI RIVER BRIDGES

Based upon previous experience, it is presumed that when new Mississippi River bridges are undertaken, they will be financed as toll revenue projects and not financed by normal highway road building revenues. The construction of additional bridges has, therefore, not been included in the improvement programs contained in this report. Nevertheless, locations for new bridges are suggested, based upon the projection of the traffic data. It is estimated that the present 70,000 vehicular river crossings per day will increase to approximately 120,000 in 1970. A new bridge will be needed in the Granite City area for which a location is suggested along the line of Niedringhaus Avenue extended. The three bridges in the downtown area of East St. Louis -- Veteran's Memorial, Eads and MacArthur -- will require supplementation. In conjunction with the utilization of the proposed East St. Louis Freeway, it is suggested that an additional crossing be built parallel and adjacent to the Veteran's Memorial Bridge. When traffic justifies, another new bridge should be built to the south of and in close proximity to the MacArthur Bridge.

### MAJOR STREET IMPROVEMENTS

The major street systems of the several areas of study are intended to serve as feeders to the primary highways and as connectors between the several neighborhoods within the areas.

#### The East St. Louis Area

This area has a system of generous east-west pavements which are inefficiently used, and a disconnected and less adequate north-south system of streets. The east-west streets can be made more efficient through the installation of a system of coordinated and progressively timed traffic lights. The north-south streets require the elimination of numerous jogs, pavement widenings and extensions. One of the major problems of the area is the provision of adequate connectors between the several bridge approaches. A connector route lying between the river and the business district was found to be too costly and of doubtful effectiveness. A more efficient means of adding flexibility to the approaches would be a further improvement of the 9th - 10th Street one-way couple and the extension of Kingshighway southerly across U. S. 460 connecting to Bond Avenue. Bond Avenue and Market Street should be operated as one-way pavements, providing an additional route for



the area and additional approach to the MacArthur Bridge. The major street improvement projects recommended in the East St. Louis area total two and one-third million dollars.

#### The Alton and Wood River Area

The principle shortcomings of this area are the lack of continuity in east-west thoroughfares and the need of relieving the downtown area of Alton of some of its through traffic. A by-pass route to the north and east of the city has been proposed. An additional north-south thoroughfare should be developed through the extension of Henry Street. A widening of the College Avenue and Milton Road pavements will increase their capacities, and the widening and extension of 9th Street will provide an additional east-west route to the north of the business district of Alton. Curb parking should be regulated in numerous locations to increase the effective pavement width for through traffic. The major street improvements recommended in this area total some four million dollars.

#### The Granite City Area

The major highway problems in the Granite City area will be met by the improvements recommended to the primary highway system, by removing through traffic and much of the local operation from the inadequate 20th Street and Missouri Avenue route. There is a need for the betterment and extension of Madison Avenue as well as other cross town projects. It is recommended that Neidringhaus Avenue be grade separated at the G.M. & O. Railroad tracks; however, elimination of grade crossings on other streets crossing the tracks was found to be unjustified. The major street improvements in the Granite City area are estimated to cost approximately one million, five hundred thousand dollars.

#### The Belleville Area

The Belleville Area is well served by belt routes, diverting much of the through traffic from city streets. Within the city the problem is one of connecting and extending existing pavements along more capacious alignments. Several improvements are recommended on the Douglas - Portland Avenue alignment as well as a betterment of the Mascoutah Avenue connection to Main Street. West "E" and "F" Streets as well as north 17th Street are recommended for widening and further improvement. The estimated cost of these projects amounts to a million dollars.

#### Recapitulation of Improvement Programs

The sum total of the estimated cost of the numerous projects recommended for the twenty year period for the entire region is \$52,390,000. This program is offered without regard as to what agencies might assume the obligation of financing each improvement; however, the program as a whole should receive the combined efforts of the municipalities and counties involved, as well as the State of Illinois and the Federal Government.



# *Highway Plan for the Illinois Portion of the St. Louis Metropolitan Area*

The Illinois portion of the St. Louis metropolitan area is a zone of intense vehicular activity. It contains a complex system of highways and railroads. It consists of several developed areas which are widely separated from each other. Its traffic activity far exceeds the amount normal to the population within the region. This abnormal activity is due to the fact that the region contains many of the functional activities for the larger St. Louis metropolitan area. This amount of activity generates unusually large quantities of highway traffic and a need for a well-developed efficient system of roads.

The purpose of this report is to examine the current and foreseeable highway needs of the region and to provide a sound program through which those needs may be met.

The area embraced in this study is that included in Madison, St. Clair and Monroe Counties. For practical purposes, however, the zone of intense study is defined as the area east of the Mississippi River encompassing Alton, Edwardsville, Collinsville, Belleville and Columbia. The county areas beyond this cordon have highway needs which are rural rather than urban in character.

The basic traffic data upon which this report is based were gathered in 1948 by the Illinois Division of Highways and the Federal Bureau of Public Roads, and exist in printed form. The traffic studies made in that survey were excellent, and a minimum of additional surveys was required to bring the data and findings up-to-date for the determination of current and continuing needs. Because of the thorough depiction of the traffic movements throughout the area contained in the survey report, this report is spared much of the detailed and complex diagramming ordinarily found in urban highway studies. Traffic flow diagrams are presented only where necessary to establish pertinent conclusions and findings.

The existing and anticipated land use of the area are shown on the next page. The most striking single feature of the land use pattern is the vast amount of land devoted to industry and the dispersion of industrial activity throughout the urban region. The radial pattern of development is typical of the growth around large metropolitan centers. Because Alton lies almost due north of St. Louis and to the west of the general line of the Mississippi River through the region, its connection to St. Louis is direct and it is less dependent upon the East St. Louis area than are the other outlying Illinois communities.



The current population of Madison, St. Clair and Monroe Counties is approximately 400,000 with some 350,000 people concentrated within the area shown on the Land Use Maps.

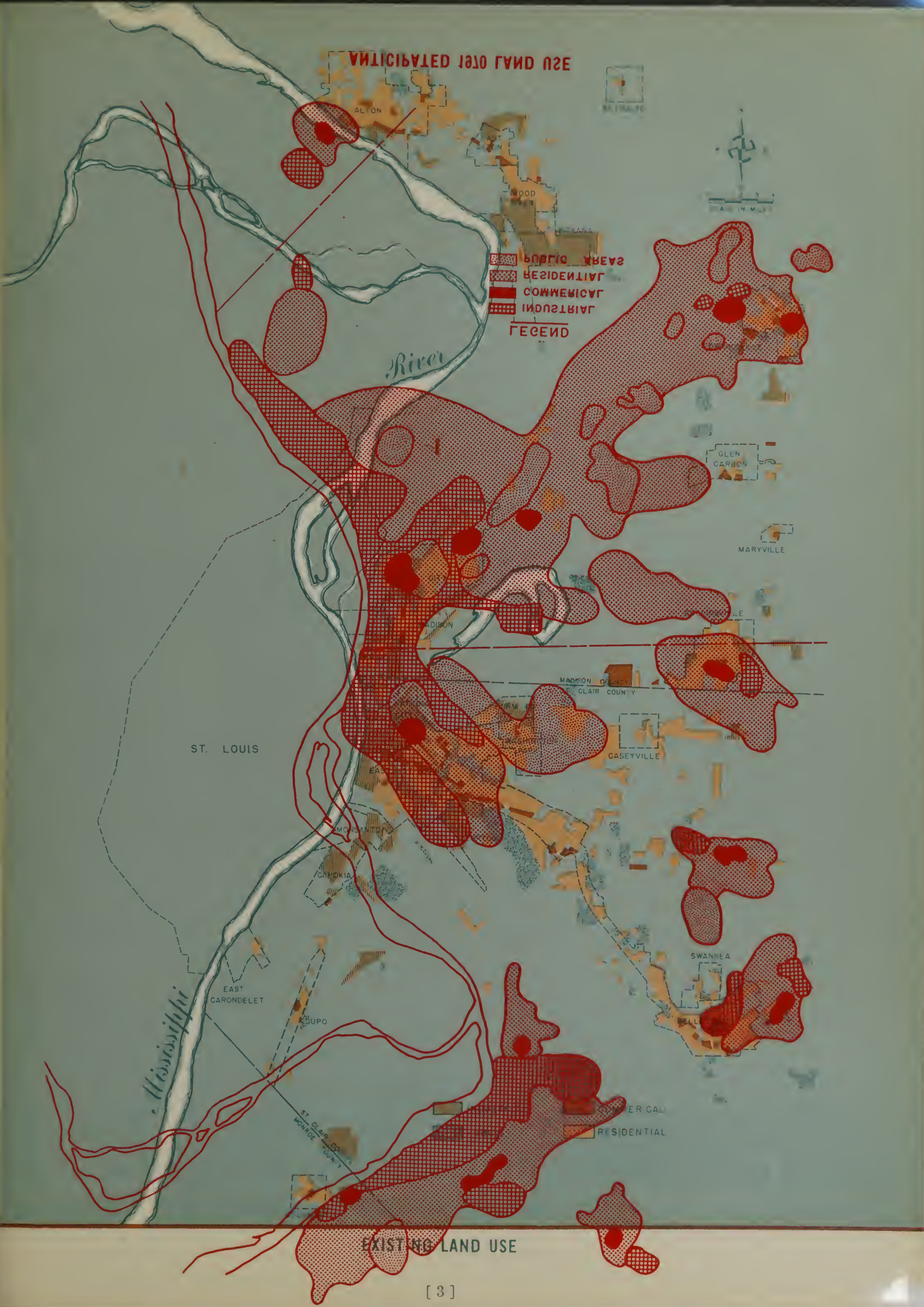
The Land Use pattern shown on the plastic overlay is that anticipated in 1970. This study was developed by Harland Bartholomew and Associates for the Bi-State Development Agency in 1950. We have taken exception only to the inclusion of a system of beltline highways crossing the middle and outer reaches of the area. Our studies have shown virtually no need for the development of such highways.

Shown on the next page is the 1951 Origin-Destination Traffic Map. This diagram reveals the magnitude and directional desires for vehicular movement within the region, rather than the traffic volumes using the existing street and highway systems. Several points are at once apparent from a study of this diagram. First it clearly reveals the great amount of external traffic, that having origin or destination outside of the urban area and which enters and leaves it via the State and Federal routes. Also to be noted is the concentration of travel desire lines in the center of East St. Louis, where the movements from the Granite City area, the northeast and eastern areas of the region and the flow from Belleville converge with those generated within East St. Louis proper. Of further interest is the small amount of travel between the Alton - Wood River area and the remainder of the urban region compared with the heavy movements within that area. The chart shows that there exists but small desire for such outer belt by-pass facilities as the U. S. 66 diversion via the Chain of Rocks Bridge, and that traffic would prefer to travel along straight lines through the urban area rather than around it. The origin-destination bands crossing the river indicate that, on the whole, the system of bridges is well located with respect to demand for crossings, with the exception of Jefferson Barracks Bridge which is poorly located to lend service to cross-river traffic flow.

Since it is the purpose of this report to provide the region with a comprehensive highway plan for the next twenty-year period, considerable effort was applied to estimating the traffic conditions which might obtain in 1970. The projected 1970 land use pattern was carefully examined and population increments were established for the several sections of the area. Some of the more pertinent findings of this study are as follows:

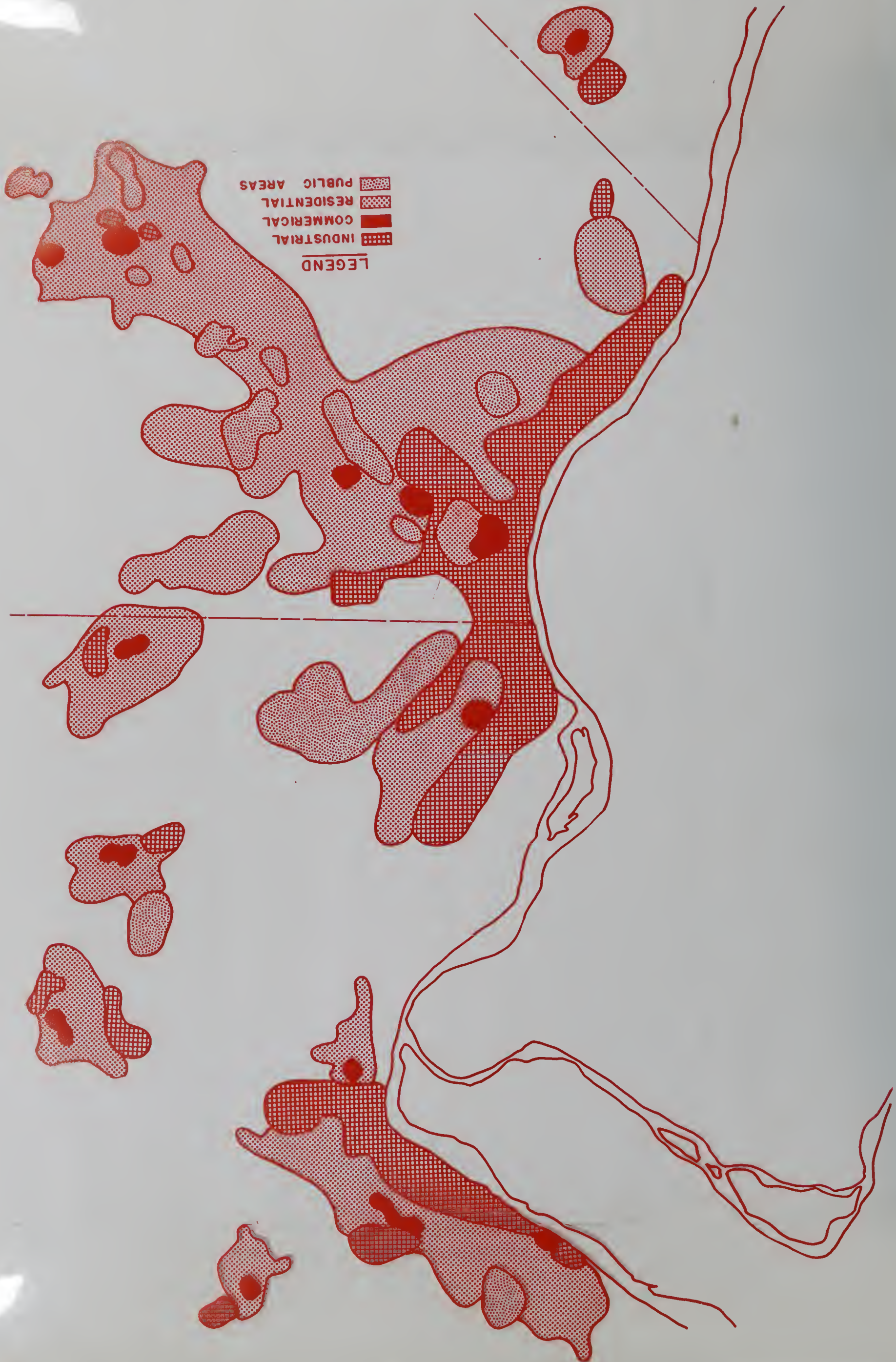


ANTICIPATED 1970 LAND USE





ANTICIPATED 1970 LAND USE







EXISTING LAND USE







1. The Alton and Wood River areas will probably double in population and activity in the next twenty years.
2. The Belleville area population will also double by 1970.
3. The Granite City section of the area will increase as much as 50% in the twenty-year interval.
4. The older areas of East St. Louis will show an activity increase of 15% to 20% while the newer eastern Sections will be more populous and active by 50%.

The Illinois Division of Highways data on traffic trends and volumes were applied to determine the probable amounts of traffic entering the area of study from the outside in 1970. Based on this research and projection, traffic entering the area via the designated inter-state routes, U. S. 66, U. S. 50 and U. S. 40 will almost double in the coming twenty years. Traffic approaching the area over U. S. 460 will also double in volume. Flow into the region on State highways 3, 13, 15, 100, 111 and 161 will probably increase in volume by as much as 40%.

By applying the projected internal and external expansion factors to the origin and destination pattern as it now exists, it was possible to synthesize the origin and destination traffic flows that would obtain in 1970. These flows are shown on the next page. They are the basis upon which the highway system recommended in this report was developed.

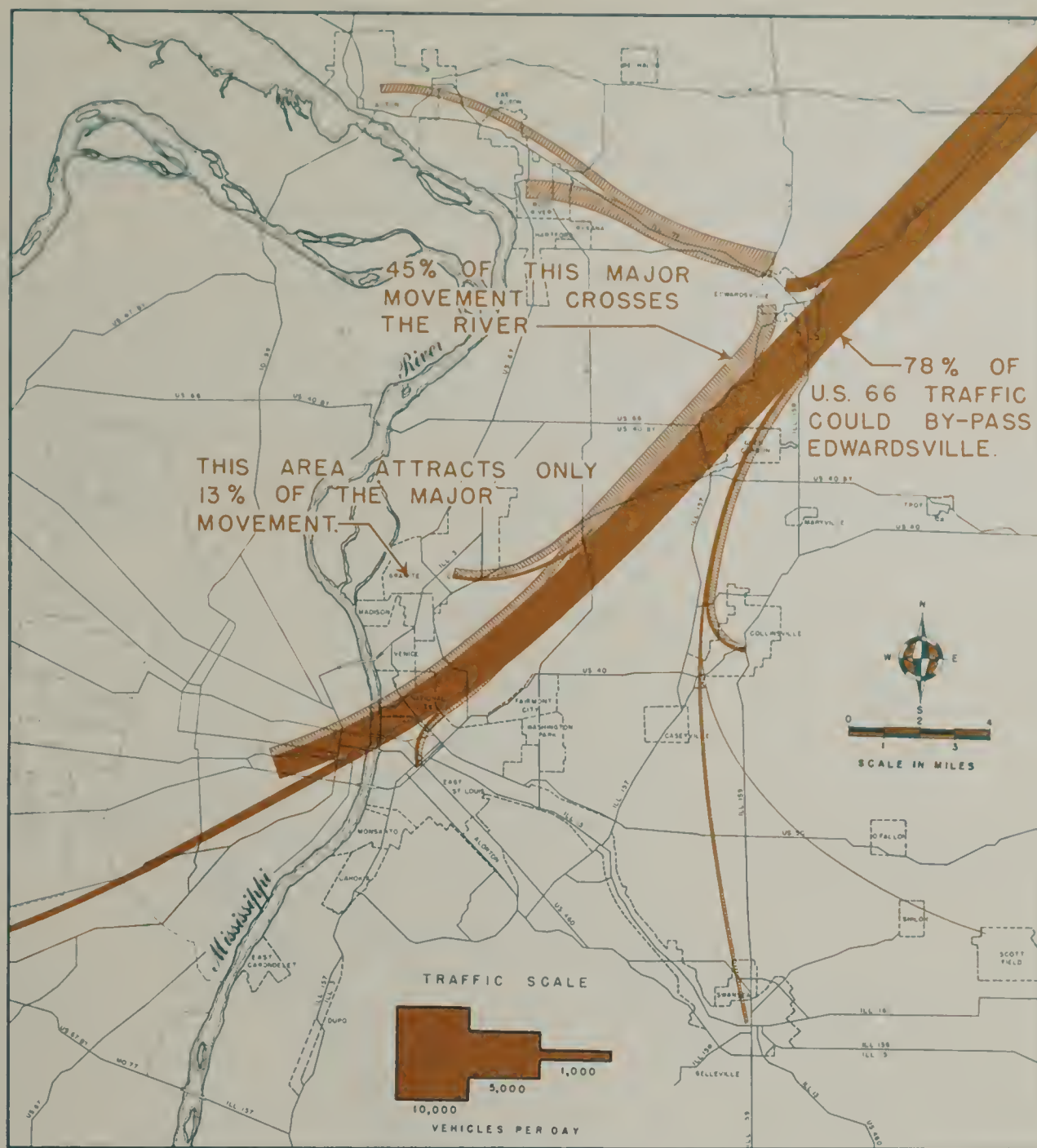
In the following sections of the report, which are concerned with specific improvement projects and programs, no attempt has been made to assign to any particular road building agency the responsibility for the physical development of the recommended projects. However, for the sake of clarity, we have divided the study into two categories, the Primary Highway System and the Major Street System. The Primary Highway System might be generally defined as the network of roads connecting the region of study with the outside, and those within the region connecting the principal areas of activity. Our Primary Highway classification for the region should not be confused with the Primary Highway System as designated by the Illinois Division of Highways. The Major Street classification is generally applied to the network of principal carriers within the several areas. The classification has thus been based upon function rather than intensity of use, and several of the highways in the Major Street System will be more heavily trafficked than some of those classified as Primary.







# DISTRIBUTION OF U.S. 66 AND EDWARDSVILLE TRAFFIC



## THE PRIMARY HIGHWAY SYSTEM

### U. S. Route 66

The accompanying map reveals the basic composition of traffic approaching the region via U. S. Route 66. Also shown is the distribution of traffic generated in Edwarsville since the two flows have a common directional pattern. The current average daily traffic volume on U. S. 66 just north of Edwarsville is some 6,700 vehicles. The highway passes through the heart of Edwarsville and toward central St. Louis, the principal zone of destination, over a lengthy, circuitous and hazardous routing. Except for a relatively short distance in the vicinity of Madison, only one lane is offered for travel in each direction. The sections of the route north of Edwarsville to Worden and south of Edwarsville to the junction with U. S. 40 by-pass have extremely poor vertical and horizontal alignments and are built on rights-of-way that are unacceptable for modern highway operation. The route, at least in these sections, stands in urgent need of rebuilding.



U. S. 66 is the major highway connecting the St. Louis area with Chicago and points between. It is a vital link in the Inter-State Highway System as provided for by Congress in 1941. In looking to the future, the Illinois Division of Highways anticipates that by 1970 its vehicular load on the north approach to the region will be almost twice that existing today, giving an average daily volume of 12,500 vehicles. We thoroughly concur in this projection.

An analysis of the origins and destinations of U. S. 66 traffic reveals that 78% of the vehicles could by-pass Edwardsville. South of that city, the major flow, including the Edwardsville movements, is directed toward the central area of St. Louis, with 35% of the total volume having destinations within that area. Of the total movement, 37% has destinations across the river and south of McKinley Bridge. Less than 13% of the major flow has origin or destination within the Granite City - Madison industrial area, yet the existing route is so located as to give this area primary service.



**ALTERNATE LOCATION "A"  
AND  
MAJOR TRAFFIC FLOWS**



**ALTERNATE LOCATION "B"  
AND  
MAJOR TRAFFIC FLOWS**



Based on these considerations and that of providing better service to traffic, any rebuilding of U. S. 66 should provide a by-pass around Edwarsville and, going toward the southwest, should be so aligned as to favor the major movements to central St. Louis.

Two alternates have been analyzed for the relocation around Edwarsville. They are shown on the accompanying sketches, which also reveal the estimated 1970 traffic volumes which would be attracted to each.

The lengths of the alternative alignments are practically equal, "A" being 18.62 miles and "B" 18.91. The estimated construction cost of "A" is \$7,127,000 and that of "B" \$8,397,000. Thus "A" is the less costly by \$1,270,000. Included in the cost estimate for line "A" is the reconstruction of 2.1 miles of U. S. Route 40 immediately east of its junction with Illinois Route 159. This reconstruction is necessary in any event and should, therefore, logically be deducted from the stated cost for line "A".



Under alternate "B" it would be necessary to rebuild Marine Road from the location westward into Edwardsville, and to build a new connection between the new highway and the existing U. S. 66 location leading westward toward the Chain of Rocks Bridge. These related connections are estimated to cost \$1,570,000.

Based upon the projected 1970 origin-destination pattern, and assuming the construction of high type traffic carriers to and through the built-up areas of East St. Louis and St. Louis, the following comparisons of traffic usage have been derived. Under alternate "A", Edwardsville-bound traffic, and that destined across the river via Chain of Rocks Bridge would use the existing U. S. 66 pavement north of Edwardsville. This is estimated at approximately 3,600 vehicles per day compared to today's volume of 6,700 vehicles on that section. South of Edwardsville U. S. 66 would serve some 2,200 daily whereas today it carries 5,300. Illinois route 159 south of Edwardsville would be used by 4,400 vehicles against today's daily volume of 5,600. None of the estimated volumes on these three highway sections would be sufficient to warrant the construction of higher type configurations than exist today. However, the pavements should be modernized in keeping with the estimated traffic usage. The two sections of U. S. 66 are so outdated and hazardous that their alignments should be improved at an early date. The cost of these betterments of the existing road, estimated at approximately \$650,000, should logically be added to the cost of Line "A".

It is to be observed that between Worden and the point of divergence of Line "A" and the existing U. S. 66 alignment, the two alternates would serve the same volume of traffic. South of that point Alternate "A" would carry 8,900 vehicles, whereas Line "B" would attract 13,300 from Edwardsville to the south. This increase under Line "B" is the traffic having origin or destination in Edwardsville and which currently moves along Illinois 159. It would, of course, be attracted to the new Line "B" since that highway would be of greatly higher calibre than Illinois 159.

An economic analysis of the two routes was prepared, comparing the costs of total vehicular operation under each alternative. The study revealed that the operation under Alternate "A" would be less costly than that under "B" by some \$90,000, annually. Combined with its lower construction cost, it was apparent that Line "A" is the preferable alternative, and we recommend its adoption. It should be developed as a four lane limited access highway, with its principal crossings grade separated.

#### U. S. Route 40

U. S. Route 40 is one of the major highways passing through the St. Louis area. Since it connects St. Louis with Kansas City and Denver to the west and Indianapolis, Columbus and Pittsburgh to the east, it has been designated as part of the Interstate Highway System. The basic composition of its traffic as it approaches the region is shown on the accompanying map. Also shown is the composition of traffic generated in Collinsville, since the major movements from this city have directional coincidence with the U. S. 40 flows.



**DISTRIBUTION OF  
U.S. 40 AND  
COLLINSVILLE TRAFFIC**



As was the case with U. S. 66, the major flow along U. S. 40 is directed toward downtown St. Louis and other points west of the river and south of Veterans Memorial Bridge. Of particular note is the apparent coincidence of the major origin-destination flow as it nears and passes through East St. Louis with that of U. S. 66, demonstrating that an improved urban connection through the East St. Louis built-up area could serve the traffic of both routes. As it exists today, U. S. 40 consists of a four lane pavement from a point west of Troy, extending westward to the 9th Street underpass of the Pennsylvania and B. & O. Railroad tracks at the northern entrance to East St. Louis. The by-pass around Collinsville is functioning properly in diverting long-haul traffic from that city. The section of the route between Collinsville and East St. Louis will probably become increasingly hazardous due to anticipated development of commercial and recreational activities along that right-of way. During the Fairmont Park racing meets, this section, despite the four lane width, is subject to congestion brought about by the conflict between the high speed through movements and those terminating at the race track. The average daily traffic volume in this section of the route currently is 11,000 vehicles. Our investi-



gations have shown, however, that an immediate relocation of this Section of U. S. 40 would not be economically justified. However, with the anticipated growth in side encroachments, in the volume of through traffic and particularly considering the attachment of U. S. 66 to U. S. 40 east of Maryville, a relocation will be necessary within the twenty year period of this study. The relocated route should offer a divided four lane pavement, should be completely grade separated from cross traffic at important highways and access to it should be limited to major interchanges.

Near and within East St. Louis, free flow of the U. S. 40 traffic is hampered by several obstacles. The underpass at the B. & O. and Pennsylvania tracks offers only one lane for travel in either direction at a point on the route where the daily volume is now approximately 17,500 vehicles. Going southward along 9th Street to St. Clair Avenue, the movement comes into direct conflict with the major flow to and from the National City stockyards as well as the U. S. 50 traffic moving along St. Clair to and from St. Louis. The U. S. 40 traffic, destined for St. Louis and choosing Veterans Memorial Bridge, mixes with the St. Clair traffic and is forced through the St. Clair - Collinsville Avenue intersection, the most congested corner in East St. Louis. That seeking to cross the river over Eads Bridge proceeds southward across St. Clair on 9th Street, is interrupted again at the State Street and Missouri Avenue intersections, and must merge with the heavy movements through the East St. Louis business district along Broadway. The traffic desiring access to St. Louis via MacArthur Bridge must make its way along 9th Street, across the heavy movements at St. Clair, State Street, Missouri Avenue, Broadway and Bond Avenue and, at Broadway must make its way to 10th Street for access to the MacArthur Bridge approach. The result of these interruptions is congestion that is intolerable to traffic, the large part of which is destined for St. Louis and which has no desire to stop in East St. Louis. It was obvious in our earliest reviews of this problem that a high type facility would be required to route the U. S. 40 and U. S. 66 cross-river traffic to the bridge approaches.

In the approach to the location and the possible configuration of this primary route, several alternatives were examined. It rapidly became apparent that the traffic volumes which would be served would warrant the highest degree of development, that of a freeway. In an urban freeway there are no pedestrians, vehicular crossings are completely grade separated from the major flows, travel along the route in opposite directions is physically separated by a dividing mall and access to the major pavements is restricted to controlled locations. The proposed Freeway for East St. Louis has been planned in this manner.

Beginning northeast of East St. Louis near the existing "Y" intersection of U. S. 40, U. S. 67 Alternate and U. S. City 66, the alignment passes under the Pennsylvania and B. & O. Railroad tracks. It then turns westward and passes under 9th Street in the midblock between Lake and Lynch Avenues. Proceeding westward it passes under Exchange Avenue, the L. & N. tracks, Baugh Avenue and St. Clair Avenue along the approximate line of 7th Street. It continues in the midblock between Collinsville Avenue and 3rd Street passing over Summit, Illinois and St. Louis Avenues and connects to the existing approach structure of Veterans Memorial Bridge. This bridge was selected for the river crossing for numerous reasons, principally as follows:



1. Its location most nearly coincides with the major origin-destination traffic flows as they approach St. Louis from U. S. 66 and U. S. 40.
2. It is the most modern of the three bridges leading to downtown St. Louis.
3. Its approach on the St. Louis side is far more commodious than those of the other bridges.
4. It connects directly to the major east-west trafficway currently being planned for St. Louis.

A reconnaissance plan of the Freeway may be found at the back of this report. The vertical and horizontal alignments of the through pavements and the ramps are in full conformity with the standards established by the American Association of State Highway Officials. The vertical alignment has been designed in such a manner as to approximately equal the amount of excavation and embankment, thereby affecting a sizeable saving in the project's cost.

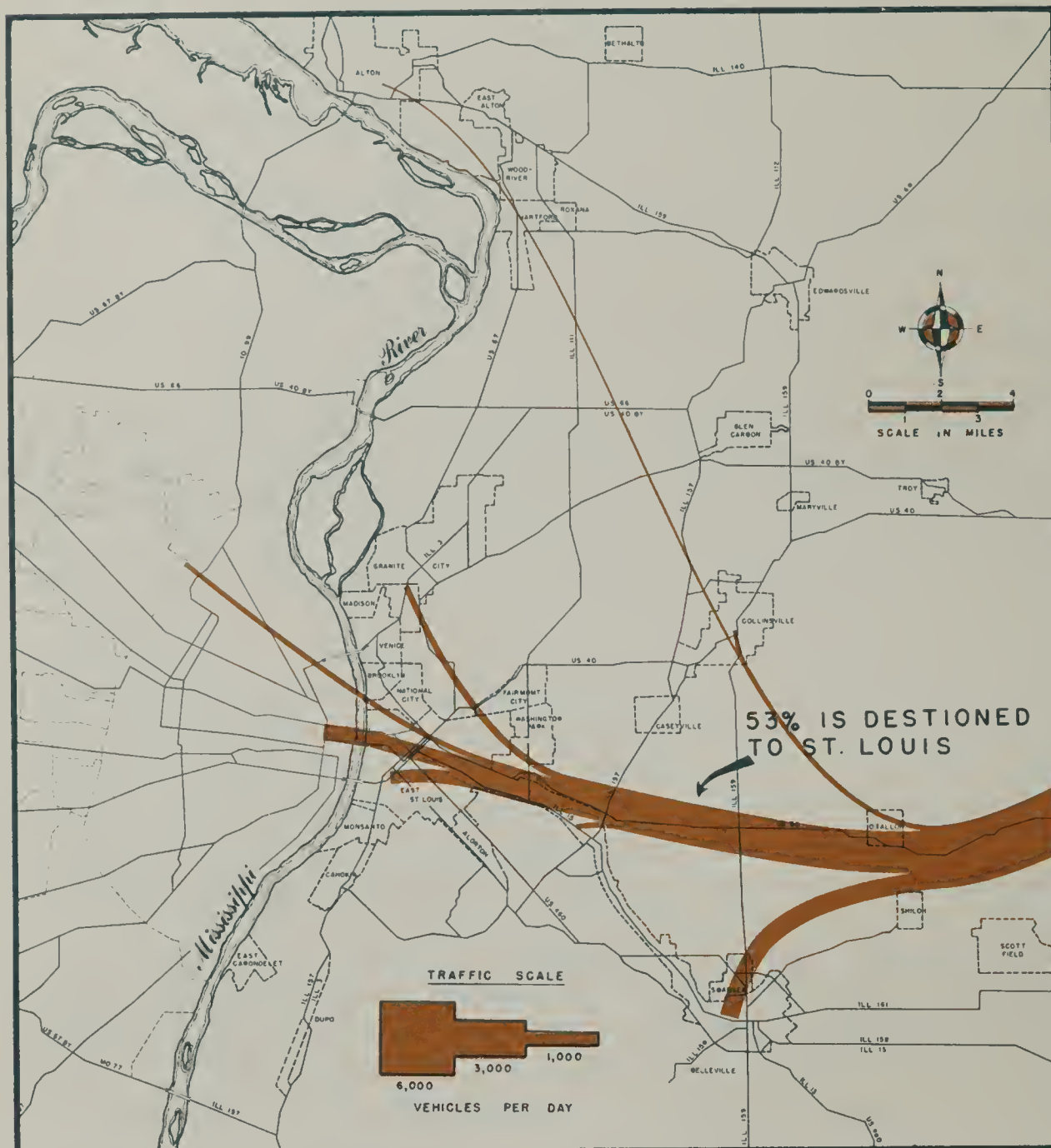
A diagram of the estimated 1951 and 1970 traffic volumes which would be attracted to the Freeway is also shown at the back of this report. In view of the fact that the anticipated 1970 traffic volumes in some sections of the Freeway exceed the capacity of four lanes of Freeway pavement, it is recommended that two lanes of pavement in each direction be initially installed, with provision in the grading and structural widths for the addition of a third lane in each direction when required.

In view of the growing congestion in East St. Louis, and the great degree of relief offered by the construction of the Freeway, it is our firm recommendation that, of the many projects programmed in this report, this one be given prior consideration.

#### 8th, 9th and 10th Streets - East St. Louis

These three streets are the current urban extensions of U. S. routes 67 Alternate, City 66, 50 and 40 as well as Illinois Route 3. The principal function of 9th and 10th Streets, which are operated as a one-way couple between St. Clair Avenue and Broadway, is the distribution of traffic to the bridge approaches and to downtown East St. Louis. In addition, the three streets are employed to exchange traffic movements between destination centers north and south of East St. Louis proper. Unfortunately, 9th Street terminates at Broadway, a heavily trafficked east-west street. Southbound vehicles on 9th Street seeking access to MacArthur Bridge must cross the westbound Broadway movements, merge with the eastbound traffic on that street and turn into 10th Street. Traffic moving south on 9th Street, and destined for Illinois Route 3, must join the westbound Broadway traffic and cross the eastbound flow while making a left turn into 8th Street. Northbound traffic on 8th Street desiring one-way travel via 10th Street, must likewise enter and cross the Broadway movements. It is our recommendation that a "Y" be constructed immediately south of Broadway, connecting 9th Street to both 8th and 10th Streets. The conflicting movements could then be controlled by means of a simple traffic signal at the 9th Street - Broadway intersection. By means of simple corner cutoffs at Trendley Avenue, the northbound flow along 8th Street would be connected to 10th Street before reaching Broadway. These improvements are shown on a reconnaissance plan at the back of this report.





## U. S. Route 50

U. S. 50 is also a major link in the Inter-State Highway System connecting the principal cities of the nation. It is the principal route of approach to the St. Louis area from Louisville and other cities in the southeastern United States.

Its daily traffic volume at the eastern edge of the region is approximately 5,000 vehicles. The major directional desires of this volume are shown on the accompanying diagram. As was the case with U. S. 66 and U. S. 40, the principal destination is the central area of St. Louis, which generates 19% of the total movement. Lesser, but nonetheless important volumes are directed to the central area of East St. Louis. It is estimated that within the twenty year period contemplated in this study that the external volume moving to and through the region will approach 10,000 vehicles per day.

From a point east of Fairview westward to approximately 40th Street in East St. Louis, the current configuration is that of a relatively free four lane divided pavement, which appears to be capable of serving the anticipated volumetric increases.



However, to prevent congestion in the future, the access rights of abutting property should be secured. Considerable judgment should be applied in the acquisition of these rights in the section immediately west of the Kingshighway intersection, where the transition from completely controlled access to unlimited access would occur. Should the access rights of occasional parcels here be prohibitively expensive, they should not be acquired.

From 40th Street to 33rd Street, St. Clair Avenue, which is the urban extension of U. S. 50, offers four through lanes and two for parking at the curbs. Between 33rd Street and the crossing of the Southern Railway tracks, the St. Clair pavement is only thirty-six feet wide on a right-of-way sixty feet in width. With parking at both curbs, travel is restricted to one lane in each direction. The current volume in this section of the route is approximately 13,000 vehicles per day, which exceeds the capacity of the two through lanes. West of the Southern Railway crossing to the Collinsville Avenue intersection, four lanes are available for movement and two for curb parking. The volume near Collinsville Avenue exceeds 20,000 vehicles per day and with cross traffic and turning movements, this section of the route is operating at its capacity during peak hours.

In our approach to a solution of the U. S. 50 urban problem, we prepared a reconnaissance plan for and an economic analysis of a Freeway which would run immediately north of, and parallel to, the L. & N. Railroad tracks, joining the current U. S. 50 alignment near Kingshighway, and connecting to the previously recommended Freeway near 7th Street. The analysis showed that the annual benefit of such a route in comparison to St. Clair Avenue, in time and mileage savings to motorists, would be less than its annual capital costs, and we, therefore, rejected this means to a solution. An analysis was then made of an expressway located on this same alignment with only the railroad crossings grade separated. This too proved not to be economically justified since the railroad grade separations constituted a major portion of the total project cost. It was then decided to adhere to the current routing along St. Clair Avenue and to increase the capacity, speed of operation and safety of that alignment. Two improvements are necessary, the first being to widen St. Clair Avenue from 33rd Street westward to 22nd Street. The recommended configuration in this length is two through and one parking lane on either side of a mall. West of 22nd Street a new section of the route would be developed, passing over the Southern Railway and the Terminal Railroad tracks and making a "Y" connecting to Baugh and St. Clair Avenues at 19th Street. From that point Baugh would be operated westbound only with a direct ramp connection to the recommended freeway near 7th Street. St. Clair would be operated as the eastbound companion between 9th and 19th Streets. These two one-way streets will provide capacities adequate to the volumes of traffic anticipated and, because of relatively light cross traffic, will operate at reasonably high speed. The section of St. Clair Avenue between 33rd and 40th Streets presents an adequate pavement width to accommodate its traffic flow, but its right-of-way is narrow and should be widened to 90 feet. This should be done and a dividing mall installed in the pavement in the later part of the twenty year period.



## Illinois Route 15

This route is the principal connector between East St. Louis and Belleville. Its development with a broad pavement on a generous right-of-way shows unusual foresight on the part of its original developers. For most of its length, at least four lanes are in operation for the movement of traffic. It currently carries a relatively high traffic volume along the entire length between the business districts of the two cities, with the daily volume near Kingshighway exceeding 10,000 vehicles. Within the cities, local movements supplement the longer-haul traffic, making for a daily count of 16,500 vehicles in downtown Belleville and approximately 13,000 east of the Illinois Avenue intersection in East St. Louis.



**DISTRIBUTION OF  
BELLEVILLE TRAFFIC**

The basic composition of the Belleville traffic is shown on the accompanying map. As can be seen, much of the traffic has origin or destination within the narrow incorporated areas of the two cities adjacent to the route. Route 15 is ideally located to serve movements between zones adjacent to its alignment. This fact is reflected







The composition of the traffic on these two routes at their approach to Belleville is shown on the accompanying diagram. Almost half of the traffic at this point is destined to Belleville. Of the major movement west of that city, a large majority has destination across the river.

From Belleville to the point of divergence of the two routes, approximately five and one-half miles to the west, the traffic today is poorly served by a two lane roadway that is below standard in pavement and right-of-way widths and in vertical and horizontal alignments. This section of the route should be replaced and relocated along an alignment to the south of the present highway. In view of the unusual growth anticipated for the Belleville area, the reconstructed highway should provide two lanes in each direction divided by a mall and access to it should be restricted to major intersections. Its crossings of the Illinois Central Railroad tracks as well as Illinois Routes 158 and 159 should be grade separated. To fully develop this recommended section and to relieve Illinois Route 15, Illinois 161 should be widened to four lanes between Route 15 and the present Route 13 and a new four lane connector developed from there westward to join the new route.

From the point of divergence of U. S. 460 and Illinois 13 westward to Alorton, U. S. 460 is currently developed as a high-type carrier, offering a four lane divided pavement with moderate grades and on a direct alignment. To prevent the development of congesting commercial establishments along its abutting frontage, it is recommended that the access rights of these properties be secured as rapidly as possible.

West of Alorton, Missouri Avenue is the urban extension of U. S. 460. In addition to the heavy volumes from the direction of Belleville, it must serve the even larger local movements generated in the East St. Louis neighborhoods through which it passes. While the volumes are reasonably well accommodated by Missouri Avenue today, additional capacity will be required with the growing traffic anticipated for the future. Recommendations for the improvement of the urban connections of U. S. 460 will be described later in this report in the section covering Major Streets.

### Illinois Route 3

This highway is the major route connecting the East St. Louis area with the central and southern parts of Monroe County. It passes through the centers of Waterloo and Columbia.

The current volume using the route is approximately 3,600 vehicles per day north of the Jefferson Barracks Bridge connection, and with the Dupo, Cahokia, and Monsanto movements, growing to 13,000 vehicles daily at the south limits of East St. Louis. The projected volumes for 1970 at these locations are 5,000 and 18,000 vehicles respectively.

Going southward from East St. Louis, Route 3 is now developed as a four lane highway with adequate lane, right-of-way and shoulder widths. The industries along its sides are set back far enough so that the terminating movements do not appear to cause congesting conflicts with through travel. At the junction with Illinois Route





DISTRIBUTION OF  
ILL. 3 TRAFFIC

157 in Cahokia, the route narrows to two lanes and continues southward on this configuration through the remainder of the county. Traffic continues to be relatively heavy as far south as Dupu and four lanes for movement will be required to this point within the next few years to properly serve the existing and anticipated volumes. In view of the developments along the existing alignment, it would be more economical to develop a new roadway rather than to widen the existing route. The new highway should be located to the east of the existing one and should consist of a four lane divided pavement.

In our study of Route 3 traffic, we gave consideration to the necessity for a by-pass around Columbia. While congestion within this city does exist, it occurs infrequently and for periods of short duration. It is our opinion, therefore, that a by-pass facility would not be justified within the twenty-year period and such a project is not recommended.



U. S. Route 67 - Illinois 111 and 159  
in the Alton - Wood River area.

The principal carrier in the Alton - Wood River area is U. S. 67 as it runs from downtown Alton eastward to Wood River. This is the only route in the area offering continuity of alignment between these two highly active residential and industrial communities. The daily traffic volume exceeds 20,000 vehicles in downtown Alton with an approximate straight line reduction to 15,000 in the East Alton area. In the busiest part of the route, four generous lanes are provided for through movement and two for curb parking. The route does not evidence serious congestion at the present time between Alton and East Alton, but a study of traffic trends indicates that this section will be operating at its capacity within a very few years. The Alton - Wood River area is one for which the traffic volumes by 1970 will be twice what they are today. The need for a relief route is quite obvious. Due to topography and the degree of development, a route paralleling Broadway and located to the north of it appears to be economically and physically unfeasible. To the south, between Broadway and the river, an alignment is possible even though this location is less accessible from a traffic standpoint. It is our recommendation that such a route be developed, extending eastward from Easton Street along Front Street. At Langdon Street the route would turn southeastward and continue between the industrial developments and the river, connecting to the proposed relocation of U. S. 67 west of Wood River. In view of the relatively short haul character of the anticipated traffic on the route and its expected volume, the development of the route as a limited access highway does not appear to be warranted. Two lanes of pavement should be provided initially, with structures and earthwork for ultimate four lane development. The development of proper access to this route will be of major importance in obtaining full utility from it. Connections should be made at Henry Street, Ridge Street, Central Avenue, Cut Street and Chesson Lane.

Full consideration was given in our study to the development of a river front highway leading westward from Alton. Our studies show that there would be practically no demand for such a highway and in view of the pressing need for costly facilities elsewhere in the area, a project of this nature is not recommended.

The existing Alternate Route 67 between East Alton and Hartford is in immediate need of replacement. The alignment is quite circuitous, is narrow, and the commercial and residential areas through which it passes generate numerous minor length movements which impede the free travel of through-bound traffic. A new and favorable location lying between the existing route and the river is already under development by the State of Illinois. Right-of-way is all but completely secured and the larger structures are completed. The completion of this improvement should proceed without delay. Connection from it to Wood River should be made along a westward extension of Ferguson Avenue. The route should extend approximately two miles south of Hartford and connect to the existing U. S. 67 pavement at the Cahokia Diversion Channel, utilizing the new, but unused, bridge at that point. The volumes of traffic anticipated indicate that the route should provide two lanes for traffic movement. With but minor exceptions the right-of-way for this project has been acquired without the acquisition of the rights of access. In view of the type of service which this route will be called upon to render, the purchase of access rights does not appear to be justified. In the section from the Ferguson Avenue connection northward to East Alton, provision should be made for a future widening of the pavement to four lane widths. The volumes also indicate that a





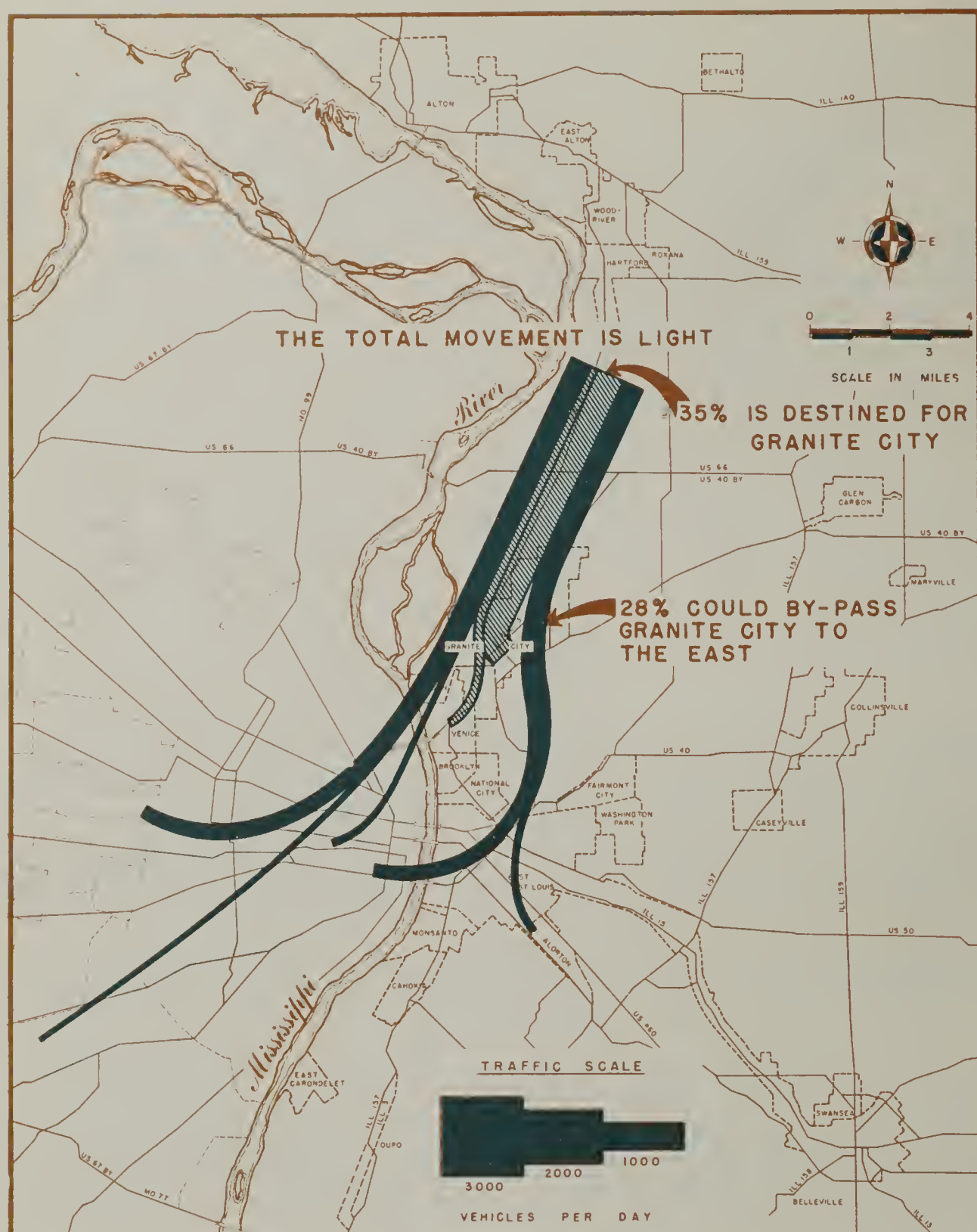
DISTRIBUTION OF TRAFFIC  
USING BROADWAY AND  
MILTON HILL ROAD

location around Hartford is economically unwarranted. U. S. 67 south of the Cahokia Diversion Channel to Granite City appears to be entirely adequate for the coming twenty years at its existing configuration. In this section the average daily volume by 1970 will probably not exceed 6,500 vehicles, or approximately 600 vehicles in the peak direction in the 30th maximum hour of use. In view of the fact that the anticipated traffic approaches the capacity of the existing pavement, no major improvement is recommended for the period of this report. However, it is recognized that, in all probability, an increase in pavement capacity will be needed shortly thereafter.

The current alignment of Illinois Route 111 passes through central Wood River, and has become congested in recent years. The Illinois Division of Highways has proposed the relocation of this route through Wood River via Central Avenue. The improvement of this street is in keeping with the needs of traffic and is, therefore, recommended.

Route 159, as it passes through Wood River, offers but two lanes of pavement for traffic movement. The Illinois Division of Highways is currently widening this pavement to a twenty-four foot width. The section of the highway between its junctions with route 111 and U. S. 67 carries traffic volumes of 9,000 to 10,000 vehicles per day. It is to be recognized that this volume will decrease with the construction of the recommended new Alternate U. S. 67 pavement to the west of the city. However, as traffic volumes in the entire area increase, this twenty-four foot pavement will be inadequate and should be widened to four lanes. As the route passes through East Alton on St. Louis Avenue, the pavement widens to four lanes, in which section the volumes are currently 15,000 to 18,000 vehicles per day. Here again the new Alternate U. S. 67 pavement will divert a considerable volume of this traffic. However, this street will also need better operating conditions, which can be effected through a control of curb parking recommended later in this report.





**COMPOSITION OF  
ALT. U.S. 67 TRAFFIC  
NORTH OF GRANITE CITY**

### U. S. Route 67 in the Granite City Area

U. S. Route 67 is currently routed through Granite City over Missouri Avenue and 20th Street. The latter street is quite narrow and serious congestion exists throughout its length, particularly in the business district and to the east where junction is effected to Edwardsville Road. This section of the route is obviously inadequate to the through and local movements.

Because of their short lengths, few of the local movements within Granite City can be removed from this route. A study of the long-haul movements was made to see if some of them might be attracted to other facilities. The accompanying diagram shows the distribution of traffic using U. S. 67 north of Granite City. The total movement is not heavy, being about 3,000 vehicles per day. By 1970 our estimates



indicate that the daily volume will be no more than 6,500 cars. Of the total movement, 35% has origin or destination within Granite City, 9% is moving to and from points between Granite City and McKinley Bridge, 28% to points in St. Louis via McKinley Bridge and the remaining 28% to and from points in Illinois south of Venice. A by-pass facility to the west of Granite City was analyzed. It would serve less than 1,000 through-bound vehicles today and only some 2,000 cars per day in 1970. It could be built only at a very great cost and would not be justified. A more realistic solution would be to build a new connection which would leave Alt. U. S. 67 near Pontoon Road and proceed southeastward over the G. M. & O. and the Wabash tracks, making connection to and crossing Nameoki Avenue north of the Madison Avenue intersection. The new route would then turn and proceed southward just east of and parallel to Warren Avenue and connect to Edwardsville Road. With this route in operation, southbound Alt. U. S. 67 traffic bound for McKinley Bridge would take the new alignment to Nameoki Avenue where it would turn south. It would then turn again into Madison Avenue and proceed directly to the bridge via this high capacity street. Traffic destined for Granite City could either use the existing route or take the proposed one to Nameoki Avenue and enter the city along Madison Avenue. The traffic destined to East St. Louis would take the new route for its entire length to Edwardsville Road, completely by-passing Granite City.

Congestion also exists on Alt. U. S. 67 in Granite City along its Edwardsville Road alignment. This route should be widened to provide four lanes instead of the existing two. The turning movements can then be made without delaying the through-bound travel. Going south, the route appears to be adequate through Madison and relatively modern four lane structures carry the route over the New York Central and under the Illinois Terminal tracks. South of the latter crossing, the route becomes a narrow two lane roadway and proceeds toward East St. Louis over an outdated and dangerous horizontal alignment. A new four lane divided highway should be developed to replace this older route, connecting to the proposed Freeway near the existing junction of U. S. 67 and U. S. 40. The abandoned Illinois Terminal Electric right-of-way provides an excellent location for a new alignment.

#### Illinois Route 111

This highway currently provides an alternative routing to Alt. U. S. 67 for the traffic exchanged between the Alton - Wood River area and East St. Louis. It is not well located with respect to the origin-destination pattern and its volume is largely the result of the inadequacy of Alt. U. S. 67 as it passes through Wood River and Granite City. With the improvements to that route as recommended in this report, Route 111 will not exhibit the traffic growth anticipated for the other Primary Highways. Its two lane configuration will be adequate for the coming 20 years, except for the previously reported urban section through Roxana and Wood River.

#### Illinois Route 157

This route too, because of its circumferential location and its lack of coincidence with major traffic flows, will not attract heavy traffic volumes. With the exception of a grade separation at the Illinois Central Railroad crossing near Centerville and an alignment improvement in the same vicinity, no major improvements are recommended.



## PRIMARY SYSTEM IMPROVEMENT PROGRAM

The previous sections of this chapter have described the needs of the Primary System for the area for a twenty year period of time, based upon the estimated traffic demands within that period. Because of the magnitude of the projects needed, the desirability of programming projects well in advance of their undertaking and the necessity of budgeting annual highway building funds, it is essential that the projects be consolidated in a program extending over the twenty year period. In the preparation of the improvement program, each project was considered as a part of the overall highway network in the light of its need in relation to the existing facilities and traffic volumes, the anticipated rate of development of the area served and the traffic demands of the future period, as well as the ultimate attainment of an integrated system of trafficways. The resulting program has been divided into three phases without regard to what road building agencies might assume the responsibility for the individual projects.

### PRIMARY HIGHWAY SYSTEM IMPROVEMENT PROGRAM

#### First Priority

<u>Project Number</u>		<u>Length in miles</u>	<u>Right- of-way</u>	<u>Estimated Cost</u>	
				<u>Construction</u>	<u>Total</u>
1	U. S. 66 - 40 Freeway from Veteran's Me- morial Bridge Approach to Alt. U. S. 67.	2.5	\$1,800,000.	\$5,250,000.	\$7,050,000.
2	Realignment and recon- struction U. S. 66 from Worden "Y" to junction U. S. 40 by-pass where required.	17.5	50,000.	605,000.	655,000.
3	Edwardsville Road (Granite City) widening from south city limits to junction proposed By-pass.	1.9		355,000.	355,000.
4	U. S. 67 By-pass north of Granite City from U. S. 67 to Edwardsville Road.	2.7	300,000.	590,000.	890,000.
5	Illinois 111 (Central Ave. in Wood River) Pave 4 lanes from Route 159 to existing Route 111 $\frac{1}{2}$ mile south of Shell plant.	2.8	40,000.	850,000.	890,000.





PRIMARY HIGHWAY SYSTEM ——— RECOMMENDED IMPROVEMENT ———

② PROJECT NUMBER IN TABULATION

PRIMARY HIGHWAY SYSTEM AND RECOMMENDED IMPROVEMENTS



6	Swansea cut-off Illinois 161 north of Swansea to Village.	4.2		325,000.	325,000.
7	Relocation of Alt. U. S. 67 from I. T. R. underpass near Madison to junction U. S. 66 and 40 proposed Freeway.	2.25	75,000.	675,000.	750,000.
8	U. S. 50 in East St. Louis, grade separations at Ter- minal and Southern Rail- way with connection to Baugh Ave. and St. Clair Ave. and widening St. Clair Ave. from 21st St. to 33rd Street.	1.1	115,000.	1,500,000.	1,615,000.
9	U. S. 50 acquire access rights from Fairview to 33rd Street in East St. Louis.		150,000.		150,000.
10	Alt. U. S. 67 relocation from St. Louis Avenue in East Alton to Cahokia Diversion Channel.	5.6	75,000.	1,250,000.	1,325,000.
11	U. S. 460 acquire access rights from south limits of Alorton to junction Illinois 13.	3.8	10,000.		10,000.
12	Improvements to 8th, 9th and 10th Streets in East St. Louis. Connections from 9th St. at Broadway to 8th and 10th, widen- ing of 10th from Broadway to Bond, corner cut-off at 8th and Trendley and jog elimination at 10th and Piggott.		70,000.	130,000.	<u>200,000.</u>

TOTAL FIRST PRIORITY IMPROVEMENTS . . . . . \$14,215,000.

Second Priority

13	U. S. 460 extension from jct. Illinois 13 west of Belleville to jct. existing U. S. 460 and Illinois 13 southeast of Belleville.	7.7	270,000.	\$5,500,000.	\$5,770,000.
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14	Illinois 161 widen from Illinois 15 to existing Illinois 13 and extend to proposed U. S. 460 extension.	1.85	33,000.	410,000.	443,000.
15	Scott Field access road from Shiloh Road to Scott Field entrance.	2.4	58,000.	300,000.	358,000.
16	U. S. 66 relocation from Worden "Y" to jct. Illinois 159.	18.62	730,000.	6,445,000.	7,175,000.
17	Illinois 157 grade separation at I. C. Railroad tracks at Centerville and realignment eliminating jog.	0.6	\$ 10,000.	\$ 300,000.	<u>\$ 310,000.</u>

TOTAL SECOND PRIORITY IMPROVEMENTS . . . . \$14,056,000.

Third Priority

18	Broadway Relief Route (in Alton) from Front Street at Market to relocated Alt. U. S. 67 near Wood River.	4.4	\$ 150,000.	\$ 950,000.	\$1,100,000.
19	Illinois 159 widening (in Wood River) from east limit Wood River to east limit of East Alton.	1.5	50,000.	325,000.	375,000.
20	Illinois 3 - relocation from Cahokia to Dupo.	4.35	200,000.	2,150,000.	2,350,000.
21	U. S. 66 and 40 relocation from Illinois 159 to East St. Louis Freeway.	12.3	420,000.	6,930,000.	7,350,000.
22	U. S. 50 relocation from Fairview to jct. existing U. S. 50 east of Lebanon.	12.2	250,000.	3,660,000.	<u>3,910,000.</u>

TOTAL THIRD PRIORITY IMPROVEMENTS . . . . . \$15,085,000.

TOTAL PRIMARY HIGHWAY SYSTEM IMPROVEMENT  
PROGRAM. . \$43,356,000.



### MISSISSIPPI RIVER BRIDGES

Traffic crossing the Mississippi River today is served by seven bridges including the Lewis and Clark Bridge at Alton, the Chain of Rocks Bridge on U. S. 66 and U. S. 40 by-pass, McKinley Bridge at Venice, the Veteran's Memorial, Eads and MacArthur Bridges at East St. Louis and the Jefferson Barracks Bridge to the south. The Lewis and Clark and Chain of Rocks Bridges each have two lanes of roadway. The McKinley Bridge has a four lane bridge roadway, each lane being divided from the companion lane by the bridge trusses. The approaches to the bridge, because of the location of street car tracks in conflicting vehicular traffic lanes, reduces the effective width of this bridge to approximately that of a two lane bridge. The Veteran's Memorial Bridge, the most recently constructed crossing, has a four lane roadway, each lane of which is ten feet in width. The Eads Bridge, while having four lanes of pavement on the structure, is reduced in effectiveness by the sharp curves on the east approach. The capacity of this bridge is estimated at slightly more than a two lane bridge. The MacArthur Bridge has three lanes on the bridge structure, but similar to the Eads Bridge, loses its efficiency through sharp angles in both approaches. The Jefferson Barracks Bridge has a two lane roadway.

Based on the physical conditions of each bridge and its approaches, an estimate has been made of a reasonable capacity of each, which is compared in the following table with the volumes accommodated in 1948 and also in 1951:

	<u>Estimated Capacity</u>	<u>1948 Recorded Volumes</u>	<u>1951 Recorded Volumes</u>
McKinley Bridge	16,000	8,400	9,500
Veteran's Memorial Bridge	27,000		16,000
Eads Bridge	24,000	17,900	15,400
MacArthur Bridge	20,000	19,000	18,700

As was stated earlier in this report, the bridges are reasonably well located to render service to today's traffic volumes with the exception of Jefferson Barracks Bridge. The 1970 river crossing pattern has been shown in some detail on the accompanying diagram. Our studies have indicated that the total crossings by 1970 will exceed 120,000 vehicles a day as compared with approximately 70,000 crossings at this time.

As revealed by these studies, the Lewis and Clark Bridge will be entirely capable of accommodating the river crossings estimated for 1970. Similarly the Chain of Rocks Bridge would accommodate its volumetric load. Consideration has been given to the suggested construction of a new river crossing near Cahokia. An examination of the 1970 origin-destination study indicates that a total daily traffic of but 7,500 vehicles might use such a bridge, and this volume dependent upon high type connections between the Cahokia and the Belleville areas, which would not be justified on the basis of the estimated usage. For the purpose of this report it is assumed that a bridge at this location will not be undertaken.







The diagram of the estimated 1970 origin - destination pattern shows that there will be approximately 19,000 vehicles desiring to cross the river in the neighborhood of McKinley Bridge each day. This would indicate that there will be a need for a second bridge in this area in the latter phase of the twenty year period. Considering the direction of the approach of traffic, the location and capacity of Niedringhaus Street as well as its proposed plan of improvement as recommended herein, it is suggested that when a new bridge in this area is required, it be built as a westward extension of that street. Its approach in St. Louis should be located across Broadway in the general vicinity of O'Fallon Park.

Because of the close proximity of the Veteran's Memorial, Eads and MacArthur Bridges, as well as the convergence of their approach routes on the Illinois side of the river, and the proposed new and improved trafficways connecting those approaches, the capacities of these three bridges and the estimated 1970 traffic demands might well be considered as one problem.

Of the total anticipated increase of 50,000 river crossings by 1970, 25,000 or 50% will occur in the vicinity of the three downtown bridges. The resulting traffic demand in that area will equal the capacity of the three existing bridges. Experience in the St. Louis area, as well as elsewhere, demonstrates that toll bridges are usually undertaken in advance of the time when existing bridges have reached their capacity traffic loads. The undertaking of a toll bridge is usually predicated upon an engineering analysis as to its financial soundness, rather than when it might be required to eliminate or forestall traffic congestion. In view of the fact that new river crossings in the St. Louis area will, in all probability, be financed through the sale of revenue bonds, the improvement of such bridges has not been included in the highway program set forth in this report. However, in the development of the highway plan for the area, it is necessary that thought be given to the location of such new bridges so that they might fit into the overall plan as developed.

It appears reasonable to anticipate that within the twenty year period or shortly thereafter, additional bridge capacity will be needed to supplement the Veteran's Memorial Bridge in connecting St. Louis and the proposed East St. Louis Freeway. In that event the new bridge might well be built parallel to, and in close proximity to the Veteran's Memorial Bridge, connecting to the bridge toll plaza on the Illinois side and to Franklin Street in St. Louis. Franklin Street, together with Delmar Street, constitute the proposed major traffic artery in St. Louis for east-west travel.

Consideration was given to the possibility of operating Eads Bridge and the Veteran's Memorial Bridge as a pair of one-way traffic routes, with the thought that such an operation might increase the total capacity. This plan was found undesirable for several reasons, including the fact that Eads Bridge connects to Washington Street in St. Louis, which is a heavy mass transit route, in all probability precluding the possibility of that street ever being operated one-way. In addition, such a plan of one-way operation would be difficult of coordination with the proposed one-way street system and highway plan as now developed for the St. Louis, Missouri area. Furthermore, the operation of the bridges as one-way routes would require extensive reconstruction of the easterly approach of the Eads Bridge, entailing an expenditure at least approaching the cost of an entirely new river bridge. Of most significance is the fact that the studies as above reported indicate that, despite



how they might be operated, the capacities of the three downtown bridges will be exceeded by the anticipated traffic volumes, requiring a new bridge in any event.

The origin-destination pattern shows a concentration of desire for river crossing in the general vicinity of MacArthur Bridge, this volume consisting of the cross-river movements from East St. Louis and those from Belleville. This traffic flow will, in the future, require more direct service and additional capacity. It would appear, therefore, that an additional bridge might be located to the south of MacArthur Bridge to accomodate this large and growing movement. A suggested location for such a bridge and its eastern approach are shown on the major street system map for the East St. Louis area later in this report.

### MAJOR STREET IMPROVEMENTS

The Primary System, as developed in the previous chapter, is intended to take care of the heavy traffic volumes moving into the area from without, as well as those volumes moving between the larger centers of development within the area. In addition to that system, there is need for a Major Street System within each of the developed areas. The units of this system would serve as feeders to the primary routes as well as major traffic arteries serving local traffic and connecting industries, shopping centers and residence zones to other centers of activity. To analyze the problems and prepare a plan of improvement for the several centers of development, it was necessary to individually study in detail each of the areas. For the purposes of study, a detailed analysis was made of each of the following areas:

1. The East St. Louis area.
2. The Alton - Wood River area.
3. The Granite City - Madison area.
4. The Belleville area.

#### The East St. Louis Area

The city of East St. Louis is fortunate in having potentially high calibre traffic carriers in an east-west direction. Examples of this are St. Clair, State, Missouri, Broadway and Bond Avenues. Unfortunately, the city does not have a similar north-south system of streets, many of them being disconnected and lacking in continuity. However, the traffic volumes in the north-south direction are light as compared with those running in an east-west direction. As was previously pointed out, East St. Louis, and particularly its downtown area, is the focal point for many of the traffic movements within the urban region and also lies on the path of much of the travel between Illinois and downtown St. Louis. While the city of East St. Louis is largely developed today, there is rapid development occurring around the perimeter of the city, an example of this being Washington Park and along the incorporated area stretching toward Belleville, accentuating the need for continuous major traffic carriers between the downtown area and the outlying developments. It is to be noted that the previously recommended primary highway system will accomodate large volumes of these longer-haul movements, relieving the city streets, and particularly the downtown area of East St. Louis, of many of today's traffic movements.



While East St. Louis does possess many streets of high potential calibre, these generous pavements, in many cases, are not organized to be used for efficient operation. Examples of this are the numerous four way stop intersections along the major carriers. Past experience has shown that such controls give an inequitable division of the right-of-way, resulting in unnecessary inhibitions to the major movement to the benefit of the lighter cross movements. The spacing of four-way stop intersections frequently invites high speed of operation in the clear sections of roadways between them, making for hazardous operation along these streets.

Another evidence of lack of organization is the almost complete lack of lane markings in East St. Louis. Experience has shown that lane definition increases the capacity of pavements, as well as the safety of through movement.

More efficient use of the pavements on the major traffic arteries can be accomplished by the installation of a system of coordinated, progressively timed traffic lights. Such a system of lights causes traffic to operate at more reasonable and uniform speeds, increases the safety of operation and provides a more proportionate division of the light signal between the major through and the minor cross movements. It is recommended that they be installed as rapidly as possible upon the designated major streets beginning with such carriers as Missouri Avenue, Broadway, State Street, Bond Avenue, St. Clair and the 9th - 10th one-way street combination.

One of the basic needs for the East St. Louis area is added flexibility in the selection of a Mississippi River crossing. Today this is largely accomplished over the 9th - 10th one-way street couple. With the proposed Freeway in operation, traffic approaching the area on U. S. Route 66 and 40 will be routed to the Veteran's Memorial Bridge over this new alignment. Direct connections will be made to the 9th - 10th Street one-way couple, providing U. S. 66 and 40 traffic with alternative routes for river crossing, if desired. Supplemental urban connectors will be needed between U. S. Routes 50 and 460 as well as Illinois Route 15.

Consideration was given to the construction of a high-type connector highway between the Veteran's Memorial Bridge, Eads Bridge and MacArthur Bridge lying between the river and the downtown area of East St. Louis. The area through which such a project would pass is intensely developed with railroad yards, railroad trestles, industrial plants and other major obstacles. Because of these developments and the existence of the elevated bridge approaches in this section, this project of necessity would have to be of an elevated character having ramp connections to each of the existing bridge approaches. A preliminary planning of the project resulted in an estimate of cost in excess of ten million dollars. Such a costly project is obviously not justified in view of the fact that traffic prefers making adjustments in its routing prior to reaching points of congestion. Furthermore, the traffic volumes which could be attracted to this route would be rather light since it would lie at approximate right angles to the bridge approaches.

A less costly and more serviceable facility for this purpose can be provided by the previously described betterment of the 9th - 10th one-way couple and the extension of Kingshighway southerly from Illinois 15 to U. S. 460 near Alorton. Carrying this extension further south to Bond Avenue, another avenue of approach to the bridges would be developed, relieving the growing concentration of vehicles on Missouri Avenue. Some additional benefit in the distribution of traffic to the bridges can be





MAJOR STREET SYSTEM ——— PRIMARY HIGHWAY IMPROVEMENT - - - - -  
 MAJOR STREET IMPROVEMENT ——— PROJECT NUMBER IN TABULATION (2)

MAJOR STREET SYSTEM AND IMPROVEMENTS FOR EAST ST. LOUIS



achieved by the development of an improved connection through downtown East St. Louis by opening up a new street south of Broadway to the west of and parallel to 4th Street, and operating it with 4th Street as a one-way combination. Such a route will also provide added entrance to the business district of East St. Louis for traffic approaching that area via Illinois 3.

Consideration has been given to the necessity of further improving St. Clair Avenue (Illinois 3) to the northwest of East St. Louis through National City toward Venice. An examination of the existing traffic demand along that route, as well as the anticipated volumes for the period of study, indicates that there would be an insufficient volume of traffic to justify either a widening of the existing pavement or grade separating the railroad crossing in National City.

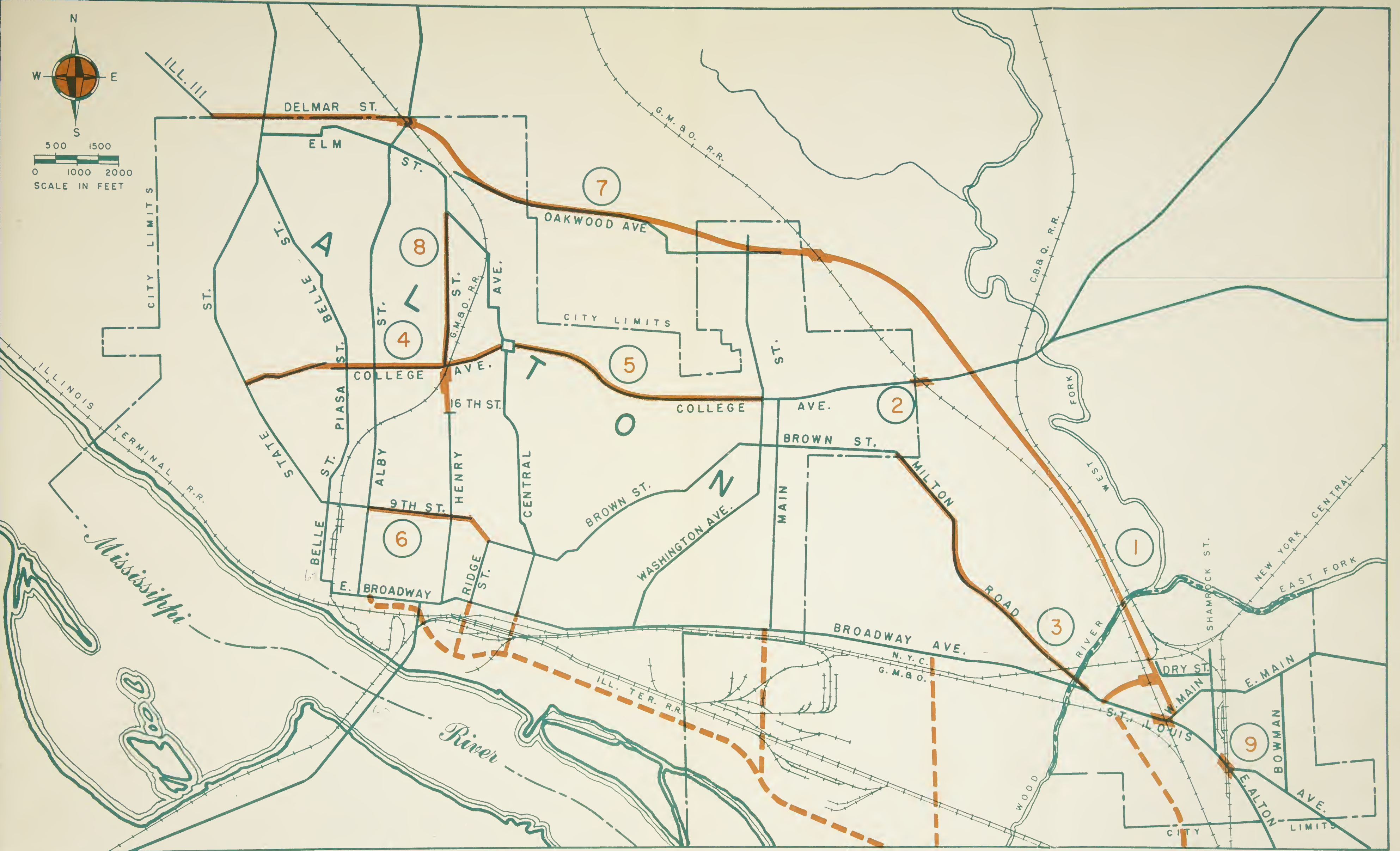
The lack of a commodious system of north-south streets in the city can largely be overcome by the betterment of the existing major streets through the elimination of jogs, extensions of existing streets and pavement widenings. These projects have been planned and estimated and are shown on the accompanying map. A capitulation of their cost and their recommended priority of undertaking is included in the Major Street Improvement Program for East St. Louis at the rear of this section.

#### The Alton - Wood River Area

As was stated earlier in this report, the Alton - Wood River area, from the highway standpoint, is relatively independent of the remainder of the region. Large amounts of traffic exchange are generated between the residential areas of Alton and the industrial areas in East Alton, Wood River and Roxana. The terrain in Alton and East Alton limits the continuity of major traffic carriers, resulting in a disconnected, inadequate highway system for east-west movement. The industrial developments and the terrain combine to also confine the path of traffic between the above described residential and industrial areas. This results in a high concentration of traffic movements on Broadway and St. Louis Avenue. In the preparation of a highway plan of development for this area, attention must be given to the fact that it is estimated that the traffic in the area will approximately double in the next twenty year period of time. An impression of the magnitude of the problem can be had by visualizing the conditions on any one of the existing trafficways if the traffic volume thereon were doubled.

Alton is faced with the problem of having most of its major north-south streets pass through its business district, thereby routing long-haul as well as local traffic through that area. There is contemplated to be built a by-pass route around Alton, extending from State Route 100 to the north of the city to a connection with St. Louis Avenue in East Alton near Main Street. This project will attract to itself the traffic approaching the city from the north and having destination in East Alton or further to the south. While that volume of traffic today constitutes but 22% of the total traffic approaching Alton from the north, the need for such a by-pass will be greater in the years to come as the area north of Alton develops. In the planning of the project, a connection should be made between the proposed by-pass route and the proposed Alt. U. S. 67 relief route, upon an approximate western extension of Dry Street extended in East Alton. A reconnaissance plan of this project, as well as the reconstruction of the St. Louis Avenue underpass at the G. M. & O. crossing may be found at the back of this report. The by-pass project should not be considered as a solution to





— MAJOR STREET SYSTEM  
 - - - PRIMARY HIGHWAY IMPROVEMENT

— MAJOR STREET IMPROVEMENT  
 (3) PROJECT NUMBER IN TABULATION

MAJOR STREET SYSTEM AND IMPROVEMENTS FOR ALTON



the Broadway - St. Louis Avenue problem, since it will attract to itself but 19% of the maximum traffic on that major route. The Broadway relief highway along the river, previously recommended in this report, therefore, is of vital necessity.

Additional cross town routes should be developed through the widening of Milton Hill Road and College Avenue, as well as the widening of 9th Street and its extension to a connection with 7th Street at Ridge Street. An additional north-south major artery can be accomplished by the extension and paving of Henry Street from 16th Street northward across the G. M. & O. Railroad tracks, and the widening of this same street from College Avenue to its Central Avenue intersection. This project will relieve Piasa Street and the business district of a large portion of the through traffic now congesting that area.

An obvious necessity in Alton is that for the reconstruction of the route 140 underpass adjacent to the G. M. & O. station. The existing structure there is outdated and hazardous.

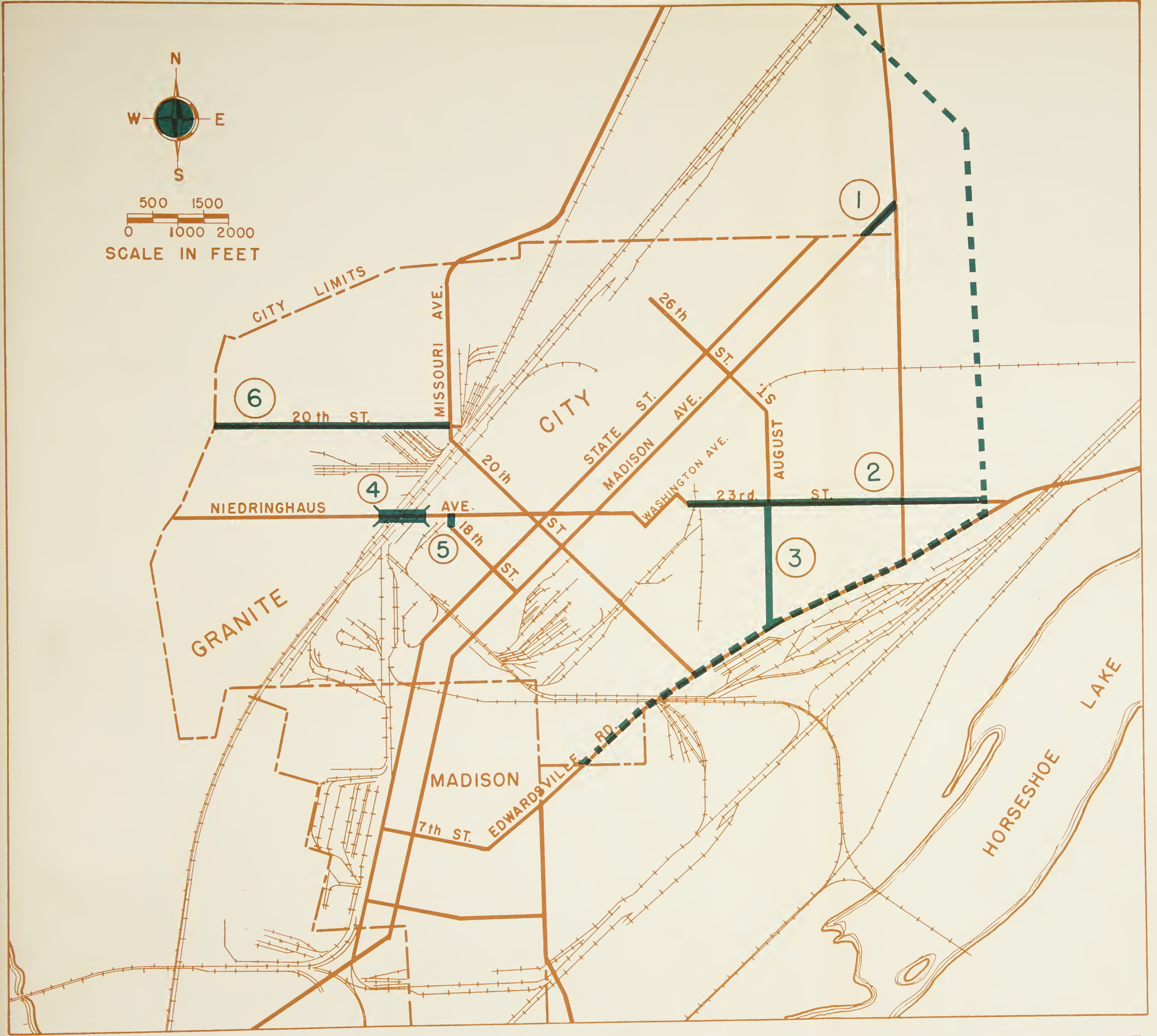
At the present time serious traffic delays occur on St. Louis Avenue in Wood River at the New York Central grade crossing. An underpass at this location would eliminate the delays to this important traffic movement.

Additional capacity can be achieved at many locations by the prohibition of curb parking. Examples of this are the three block sections of State Street in north Alton immediately to the south of Delmar, where parking should be prohibited. Another location is St. Louis Avenue in East Alton where the diagonal parking to the east of Main Street should be eliminated and replaced by parallel parking. This street will be called upon to accommodate increasing volumes of traffic, and as the demand increases, further parking restrictions will be necessary. At that time it will be necessary to eliminate curb parking, at least during peak hours of operation. In upper Alton the existing diagonal curb parking along College Avenue between Washington Avenue and Main Street should be converted to parallel parking to facilitate through movement. A program of the recommended improvements in the Alton - Wood River area is shown on the accompanying map, and the individual projects are tabulated in the program included at the rear of this section.

#### The Granite City area:

The Granite City area lies on the path of a relatively small amount of traffic passing between the Alton area and the East St. Louis area, as well as a somewhat larger volume of traffic approaching the McKinley Bridge for entry into St. Louis. These volumes of traffic will largely be diverted from 20th Street and Missouri Avenue by the projects previously recommended in this report, including the widening of Edwardsville Road and the construction of a by-pass route north of the city connecting Edwardsville Road to Alt. U. S. 67. A major artery lying along its center of activity is Madison Avenue, a street which today is carrying volumes equal to not more than half of the street's potential capacity. Additional capacity of the street could be obtained if the area occupied by street car tracks were satisfactorily paved. This Avenue should be improved northeasterly by widening between the north city limits and Nameoki Avenue, which can be accomplished when the street car tracks in that area are removed. As previously reported, Niedringhaus Avenue appears to offer distinct advantages as the approach street to a new river





- MAJOR STREET SYSTEM
- PRIMARY HIGHWAY IMPROVEMENT
- MAJOR STREET IMPROVEMENT PROJECT NUMBER IN TABULATION

MAJOR STREET SYSTEM AND IMPROVEMENTS FOR GRANITE CITY



bridge when built. As such, and as a major street serving the city in an east-west direction, it should be further improved by the construction of an underpass at the tracks of the G. M. & O. Railroad when the bridge might be built. The route should be improved to the east along the line of 23rd Street between Washington Avenue and the proposed by-pass route. This latter improvement should be made regardless of the bridge development. A betterment of the connection between Niedringhaus Avenue and 18th Street as the latter extends to the south would be advantageous, diverting from the business district Niedringhaus traffic desiring connection with Madison Avenue.

The Bi-State Authority is proposing the construction of a river dock along the new Mississippi waterway at the western extension of 20th Street. The amount of traffic to be generated by the dock facilities is difficult of evaluation. In the event that the traffic is of sizeable magnitude, the 20th Street pavement should be widened to present four lanes for through movement.

Twentieth Street to the northwest of the business district today accommodates all of the traffic approaching the downtown area via Alt. U. S. 67, as well as the traffic to and from west Granite City. With the construction of the By-pass route to the east of the city, the traffic on 20th Street will be principally local in character, not justifying the construction of a grade separation at the railroad tracks to the west of the business district. A grade separation at this location, because of the extensive number of railroad tracks involved, would be exceedingly costly and would only be justified by a very large measure of traffic delay and inconvenience. However, should the volumes generated at the docks reach considerable proportion, the question of a 20th Street grade separation should be re-examined.

With the major connections previously recommended, the traffic problem in Granite City largely becomes the connection of the several neighborhoods to the major carriers. There is a clear lack of connection from the general neighborhood of Wilson Park across Madison Avenue to Edwardsville Road for travel to East St. Louis. This deficiency can be overcome by extending August Street from 23rd Street southward to a connection with Edwardsville Road. This project will provide an alternate route for traffic, much of which today of necessity passes through the business district and makes connection via 20th Street.

During the course of our studies, suggestions have been offered that several of the street crossing at the G. M. & O. Railroad tracks be grade separated. Similar to the 20th Street problem, each of these locations would require major capital expenditures and would serve relatively small volumes of vehicular traffic, not of sufficient magnitude to justify their undertaking.

The improvements recommended for this area are shown on the previous map and are included in the program tabulation to be found at the rear of this section. For an area of Granite City's size and activity, the program may appear to be somewhat modest. It must be remembered, however, that two major projects, namely the Edwardsville Road widening and the construction of the Alt. U. S. 67 by-pass, both of which will greatly benefit Granite City, are contained in the program of improvements to the Primary Highway System.



## Belleville Area

The Belleville area is particularly well served today by by-pass highway facilities, which present circumferential routings to traffic approaching the city from all directions. However, within the city there is an inadequate system of streets connecting the several neighborhoods and the downtown area. This condition is well exemplified by the route consisting of Douglas and Portland Avenue, where there is a gap at Main Street caused by a severe jog, and another one just north of the L. & N. tracks. These jogs should be eliminated and better service offered by extending Portland Avenue southward from McClintock Avenue to Mascoutah Road.

Poor connections also exist in the area just north and west of the business district. The best choice for improvements would be along the line of West "E" and West "F" Streets between 17th Street and Illinois Street. The anticipated traffic volumes on these streets will not warrant the capital expenditure required for widening, and the capacities should be increased, instead, through a curtailment of curb parking. However, "E" Street should be extended westward to make direct connection to North 17th Street, and a smoother connection should be made to West "F" Street at the 5th Street intersection.

The northwest area of Belleville is growing rapidly at the present time and will be fully developed, in all probability, by 1970. It will be necessary to improve a route connecting that area with the business district, as well as with West Main Street and the belt highways. The central area north of the business district is currently well served by both Illinois Street and Lebanon Avenue. With the anticipated traffic volumes of these streets, the full capacity of the streets should be developed. It will be necessary to rebuild the overpass across the L. & N. Railroad tracks on Lebanon Avenue and to rebuild, at a wider configuration, the bridge on Illinois Street across Richland Creek. To the southeast of the business district, Mascoutah Avenue is a principal carrier. Its connection to Main Street is narrow and hazardous. The jog just south of Main Street should be eased, and parking should be prohibited between the jog and the Main Street connection.

The several improvement projects for the Belleville area are shown on the next facing page and can be found in the following table.

### EAST ST. LOUIS AREA

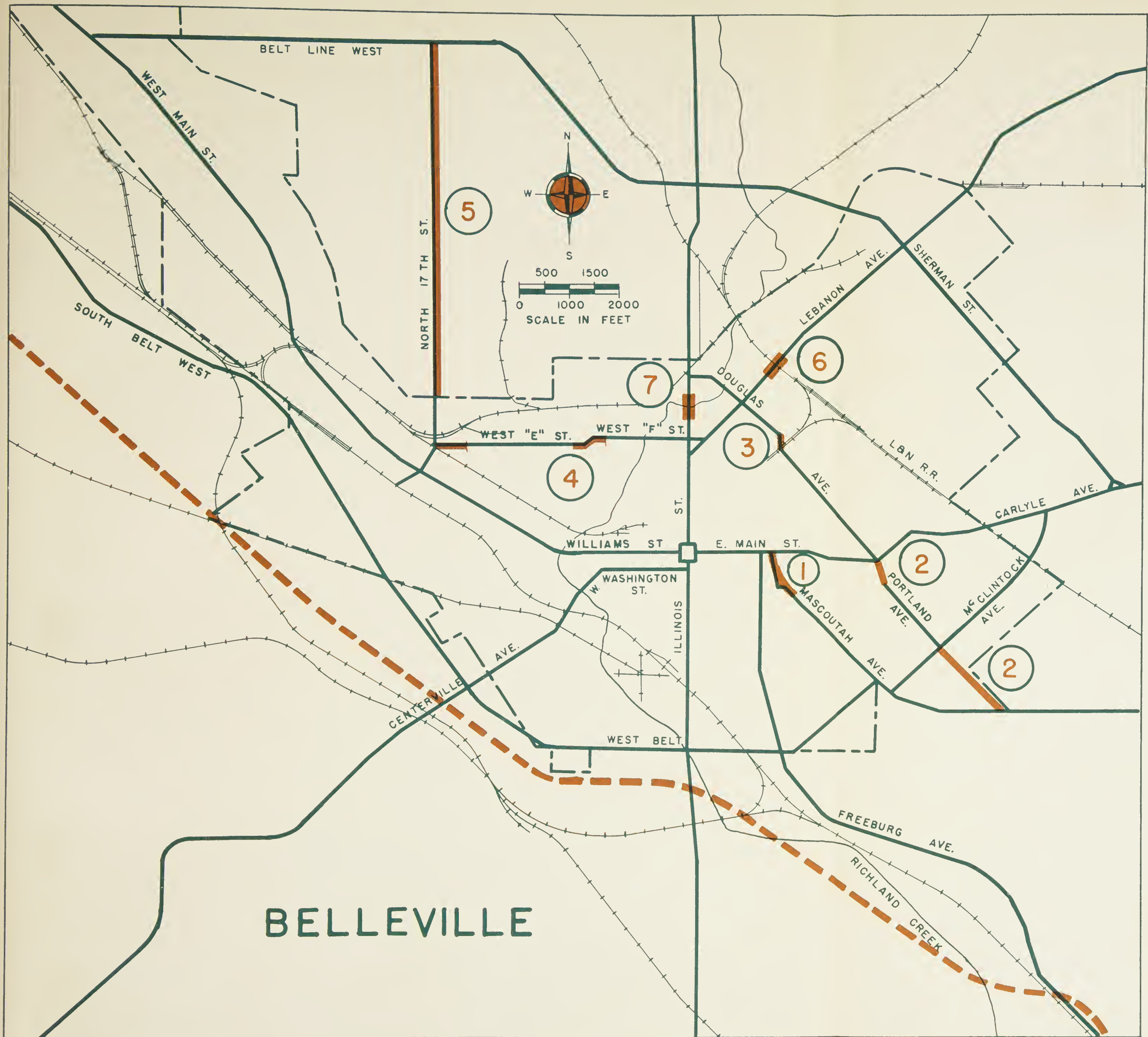
#### MAJOR STREET IMPROVEMENT PROGRAM

<u>Project Number</u>		<u>First Priority</u>		
		<u>R. O. W.</u>	<u>Estimated Cost</u>	
			<u>Construction</u>	<u>Total</u>
1	U. S. 460 connection to Bond Avenue at Dallas Street.	\$ 120,000.	\$ 560,000.	\$ 680,000.
2	Bond Avenue - corner cut-off at 13th Street and connection to Market Avenue near 10th Street.	70,000.	50,000.	<u>120,000.</u>
TOTAL FIRST PRIORITY IMPROVEMENTS . . .				<u>\$ 800,000.</u>



Project Number		R. O. W.	Estimated Cost	
			Construction	Total
Second Priority				
3	Extension of 3rd Street from Broadway to Trendley Avenue.	\$ 35,000.	\$ 250,000.	\$ 285,000.
4	Market Avenue paving from 4th Street to 10th Street.		80,000.	80,000.
5	Trendley Avenue paving from 4th Street to 14th Street in - cluding jog elimination and connection at 10th Street and connection to Market Avenue at 14th Street.	50,000.	340,000.	<u>390,000.</u>
TOTAL SECOND PRIORITY IMPROVEMENTS . . . . .				<u>\$755,000.</u>
Third Priority				
6	Market Avenue repairing and resurfacing from 14th Street to Dallas Street.		\$ 285,000.	\$ 285,000.
7	Kingshighway extension from Lake Drive to U. S. 460.	\$ 75,000.	340,000.	415,000.
8	15th Street - eliminate jog at Missouri Avenue.	10,000.	20,000.	30,000.
9	25th Street - eliminate jog at State Street.	5,000.	19,000.	24,000.
10	38th Street - eliminate jog at College Avenue.	\$ 5,000.	\$ 5,000.	\$ 10,000.
11	Waverly Avenue - eliminate jog at 25th Street.	5,000.	25,000.	30,000.
12	Forest Boulevard - corner cut-off at 40th Street.	5,000.	16,000.	<u>21,000.</u>
TOTAL THIRD PRIORITY IMPROVEMENTS . . . . .				<u>\$815,000.</u>
TOTAL EAST ST. LOUIS MAJOR STREET IMPROVEMENTS . . . . .				<u>\$2,370,000.</u>





MAJOR STREET SYSTEM AND IMPROVEMENTS FOR BELLEVILLE



ALTON - WOOD RIVER AREA  
MAJOR STREET IMPROVEMENT PROGRAM

<u>Project Number</u>		<u>First Priority</u>			<u>Estimated Cost</u>	
		<u>Right- of-way</u>		<u>Construction</u>	<u>Total</u>	
1	Alton By-pass highway from Main Street in East Alton to Illinois 140 including connection to St. Louis Avenue.	\$ 45,000.		\$1,010,000.		\$1,055,000.
2	Reconstruction - Route 140 under-pass at G. M. & O. Railroad.			160,000.		<u>160,000.</u>
TOTAL FIRST PRIORITY IMPROVEMENTS . . .						<u>\$1,215,000.</u>

<u>Second Priority</u>						
3	Milton Hill Road widening from Broadway Avenue to Brown Street.	15,000.		555,000.		570,000.
4	Madison Avenue and 20th Street repaving from State Street to Central Avenue.	10,000.		365,000.		375,000.
5	College Avenue widening from Central Avenue to Rock Springs Road.			240,000.		240,000.
6	9th Street widening from Alby Street to Liberty, and extension to 7th Street at Ridge.	40,000.		100,000.		<u>140,000.</u>
TOTAL SECOND PRIORITY IMPROVEMENTS . . .						<u>\$1,325,000.</u>

<u>Third Priority</u>						
7	Alton By-pass highway from Illinois 140 to Illinois 100.	200,000.		880,000.		1,080,000.
8	Henry Street extension from 16th Street to 20th Street and widen from 20th Street to Central Avenue.	10,000.		275,000.		285,000.
9	Wood River - underpass at St. Louis Avenue crossing of New York Central Railroad.	75,000.		175,000.		<u>250,000.</u>
TOTAL THIRD PRIORITY IMPROVEMENTS . . .						<u>\$1,615,000.</u>

TOTAL ALTON - WOOD RIVER  
MAJOR STREET IMPROVEMENTS . . . . . \$4,155,000.



GRANITE CITY AREA  
MAJOR STREET IMPROVEMENT PROGRAM

First Priority

<u>Project Number</u>		<u>Right- of-way</u>	<u>Estimated Cost</u>	
			<u>Construction</u>	<u>Total</u>
1	Madison Avenue widening - North city limits to Nameoki Avenue.	\$ 20,000.	\$ 55,000.	\$ 75,000.
2	23rd Street widening from Washington Avenue to pro- posed U. S. 67 by-pass.		200,000.	<u>200,000.</u>
TOTAL FIRST PRIORITY IMPROVEMENTS . . . .				<u>\$275,000.</u>

Second Priority

3	August Street extension from 23rd Street to Edwardsville Road.		\$ 105,000.	\$ 105,000.
4	Niedringhaus Avenue grade sepa- ration at G. M. & O. Railroad tracks.		830,000.	<u>830,000.</u>
TOTAL SECOND PRIORITY IMPROVEMENTS . . . .				<u>\$ 935,000.</u>

Third Priority

5	18th Street realignment at Niedringhaus Avenue.	\$ 10,000.	\$ 30,000.	\$ 40,000.
6	20th Street widening from west city limits to Missouri Avenue.		260,000.	<u>260,000.</u>
TOTAL THIRD PRIORITY IMPROVEMENTS. . . . .				<u>\$300,000.</u>
TOTAL GRANITE CITY MAJOR STREET IMPROVEMENTS . . . . .				<u>\$1,510,000.</u>



BELLEVILLE AREA  
MAJOR STREET IMPROVEMENT PROGRAM

First Priority

<u>Project Number</u>		<u>Right- of-way</u>	<u>Estimated Cost</u>	
			<u>Construction</u>	<u>Total</u>
1	Mascoutah Avenue jog elimi- nation near Main Street.	\$ 5,000.	\$ 25,000.	\$ 30,000.
2	Portland Avenue - Douglas Avenue connection south of Main Street and pave Portland Avenue from McClintock Avenue to Mascoutah Avenue.	15,000.	110,000.	125,000.
3	Douglas Avenue jog elimi- nation near L. & N. Rail- road tracks.	10,000.	20,000.	<u>30,000.</u>
TOTAL FIRST PRIORITY IMPROVEMENTS. . . .				<u>\$185,000.</u>

Second Priority

4	West "E" Street extension 16th to 17th Street and jog elimination on "E" and "F" Streets at 5th Street.	\$ 25,000.	\$ 55,000.	\$ 80,000.
5	North 17th Street paving from city limits to Illinois 161.		455,000.	<u>455,000.</u>
TOTAL SECOND PRIORITY IMPROVEMENTS. . . .				<u>\$535,000.</u>

Third Priority

6	Lebanon Avenue overpass recon- struction at L. & N. Railroad.		\$180,000.	\$180,000.
7	Illinois Street bridge recon- struction at Richland Creek.		100,000.	<u>100,000.</u>
TOTAL THIRD PRIORITY IMPROVEMENTS. . . .				<u>\$280,000.</u>

TOTAL BELLEVILLE AREA  
MAJOR STREET IMPROVEMENTS . . . . . \$1,000,000.



RECAPITULATION  
of  
RECOMMENDED IMPROVEMENT PROGRAMS

PRIMARY HIGHWAY SYSTEM

First Priority	\$14,215,000.	
Second Priority	14,056,000.	
Third Priority	<u>15,085,000.</u>	\$43,356,000.

MAJOR STREET SYSTEMS

East St. Louis Area:		
First Priority	\$800,000.	
Second Priority	755,000.	
Third Priority	<u>815,000.</u>	\$ 2,370,000.

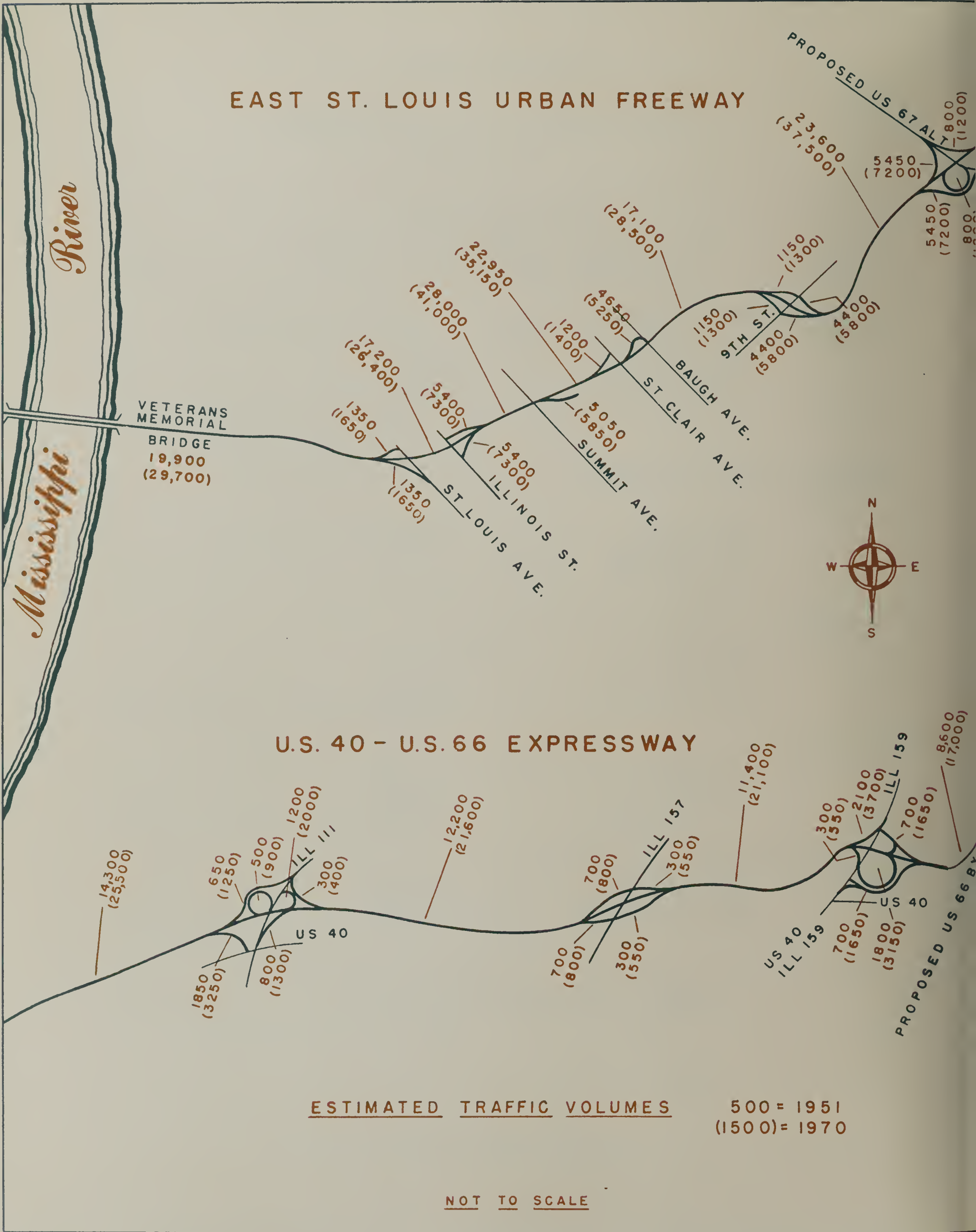
Alton - Wood River Area:		
First Priority	\$1,215,000.	
Second Priority	1,325,000.	
Third Priority	<u>1,615,000.</u>	\$ 4,155,000.

Granite City Area:		
First Priority	\$275,000.	
Second Priority	935,000.	
Third Priority	<u>300,000.</u>	\$ 1,510,000.

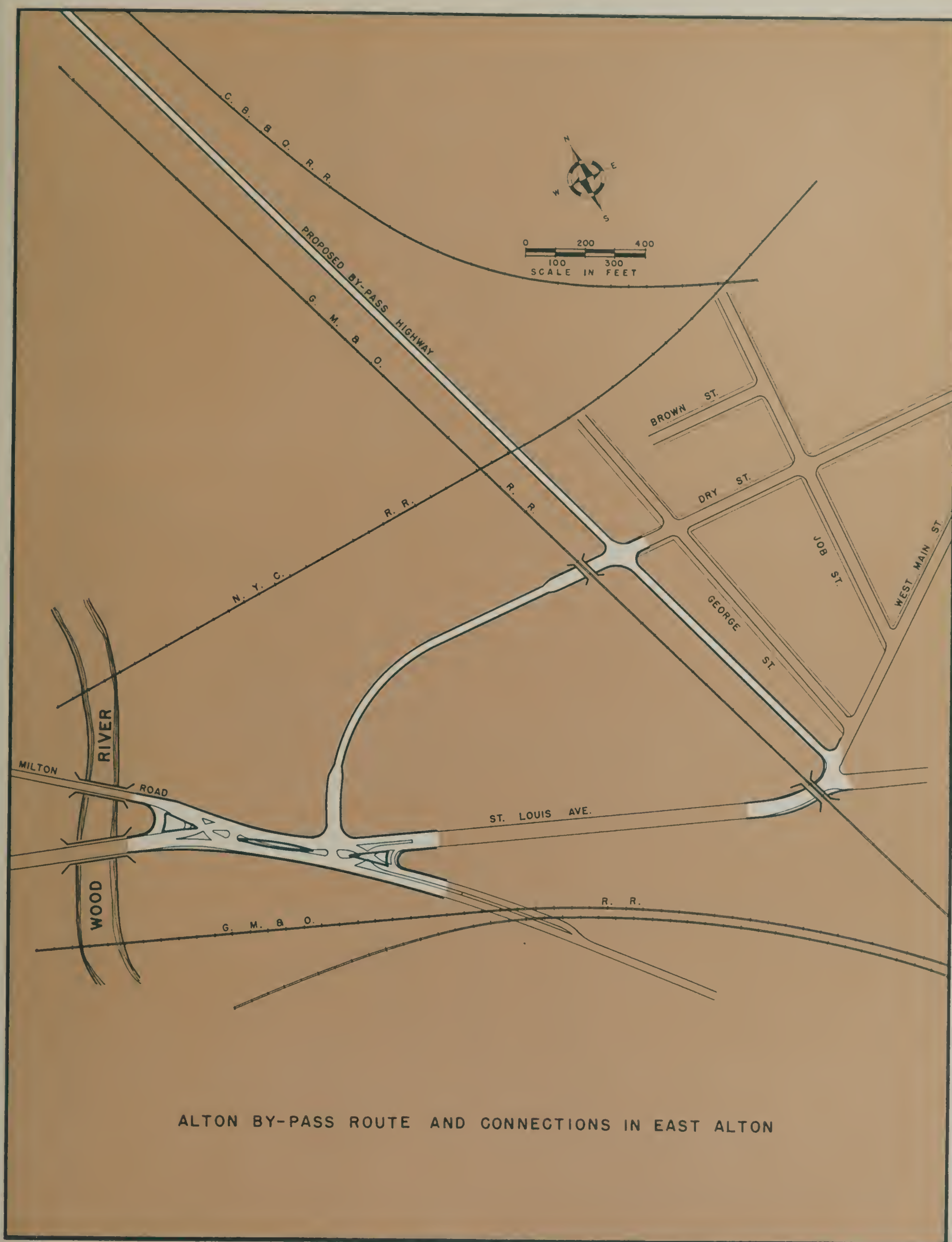
Belleville Area:		
First Priority	\$185,000.	
Second Priority	535,000.	
Third Priority	<u>280,000.</u>	\$ 1,000,000.

GRAND TOTAL — Primary Highway System  
and Major Street Systems Improvements . . . . . \$52,391,000.

















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8th ST.

9th ST.

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11th ST.

DIVISION

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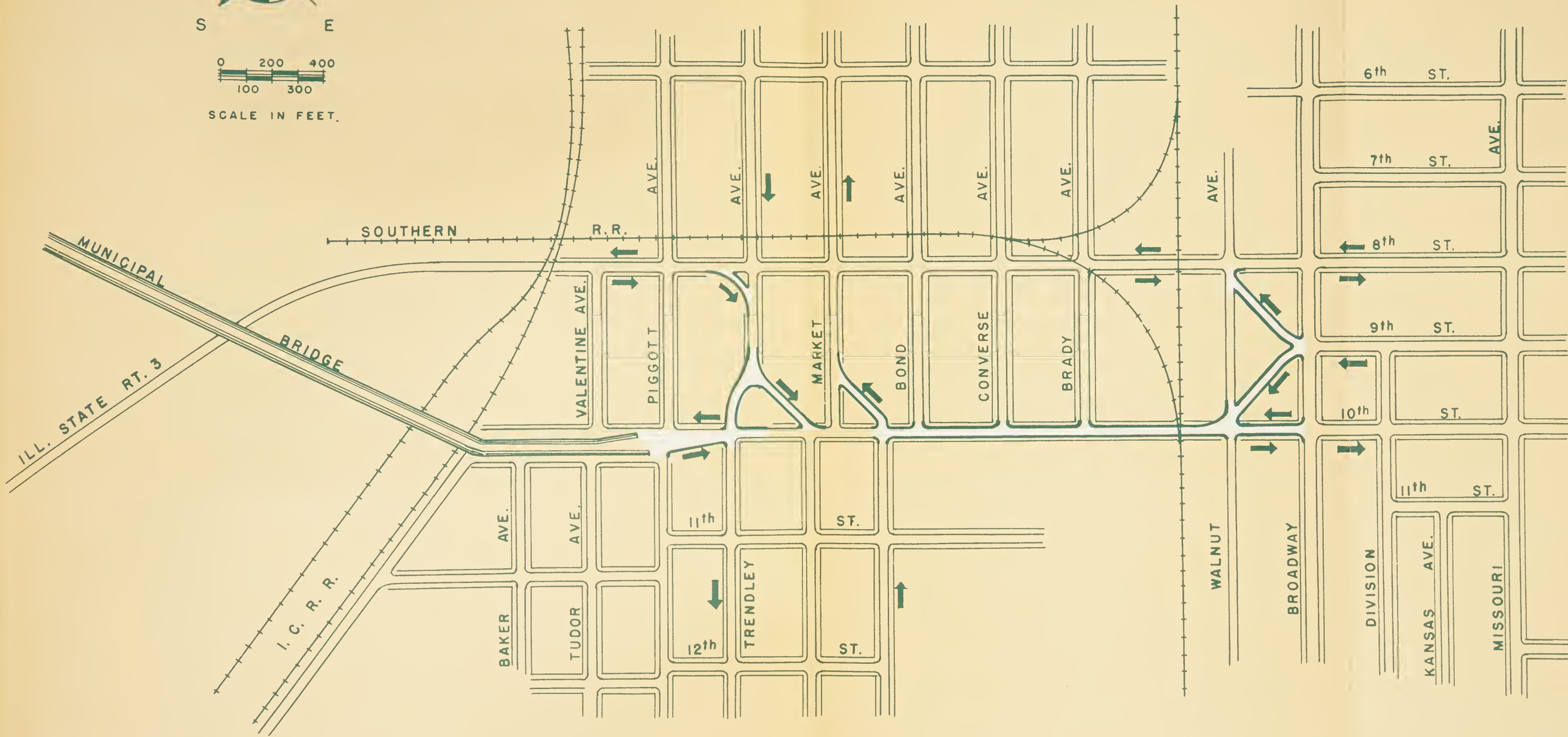
MUNICIPAL  
ILL. STATE RT. 3

TO 8th., 9th. & 10th. STREETS  
, ILLINOIS





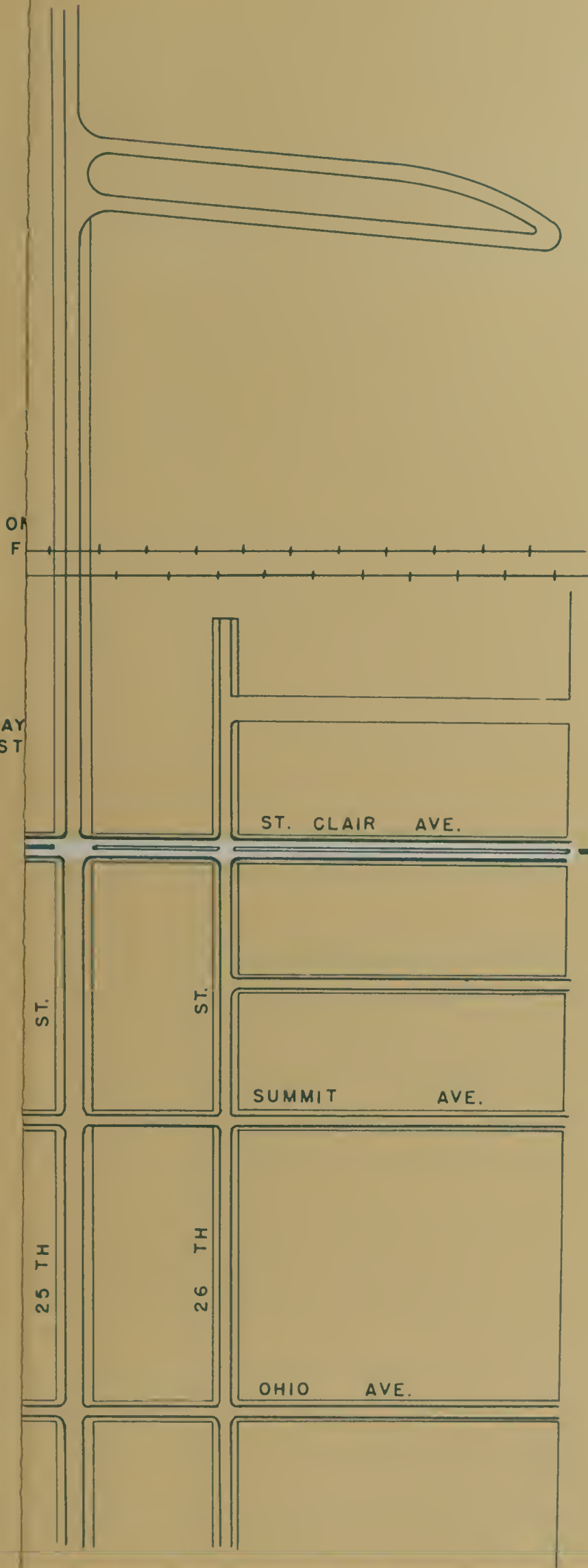
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IMPROVEMENTS TO 8th., 9th. & 10th. STREETS  
EAST ST. LOUIS, ILLINOIS

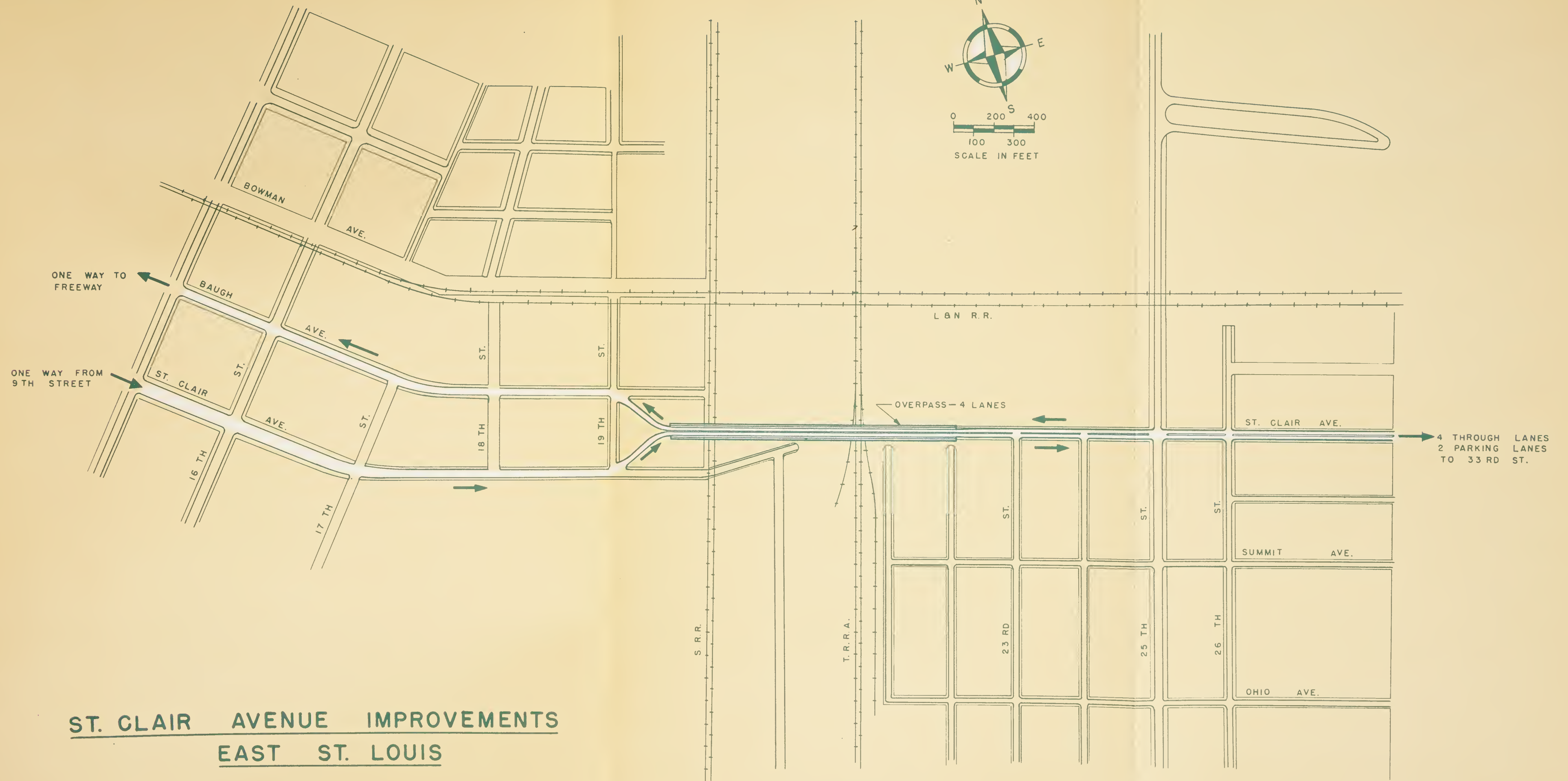


ONE WAY  
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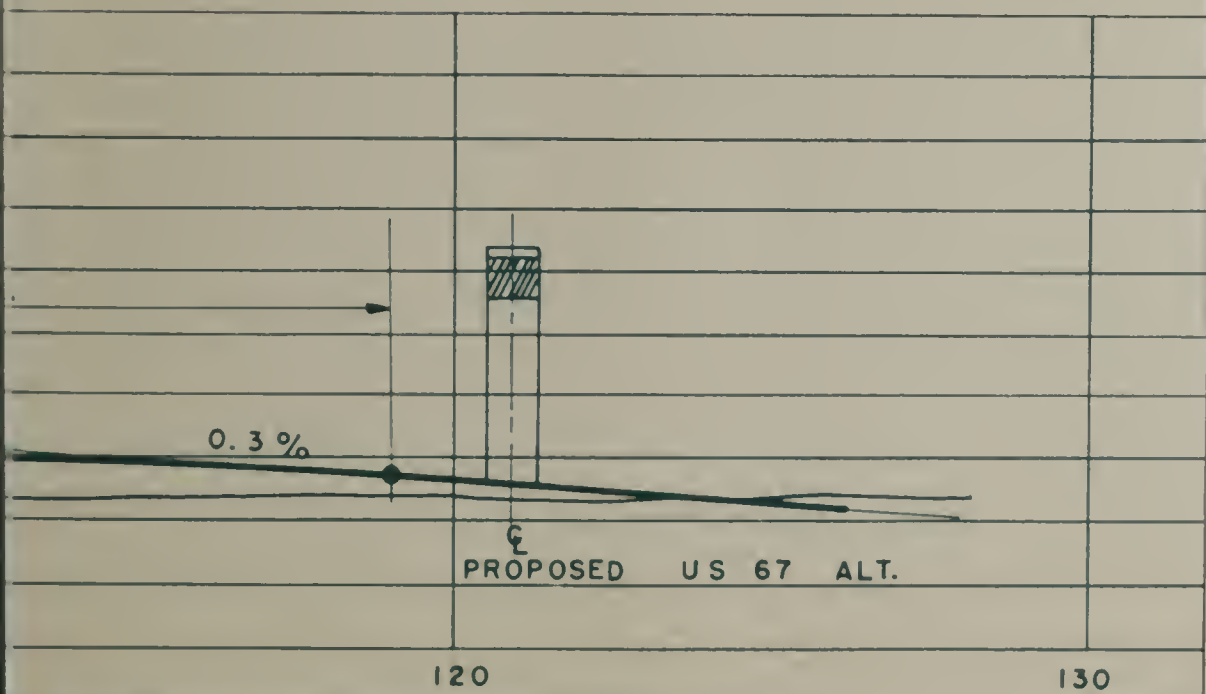
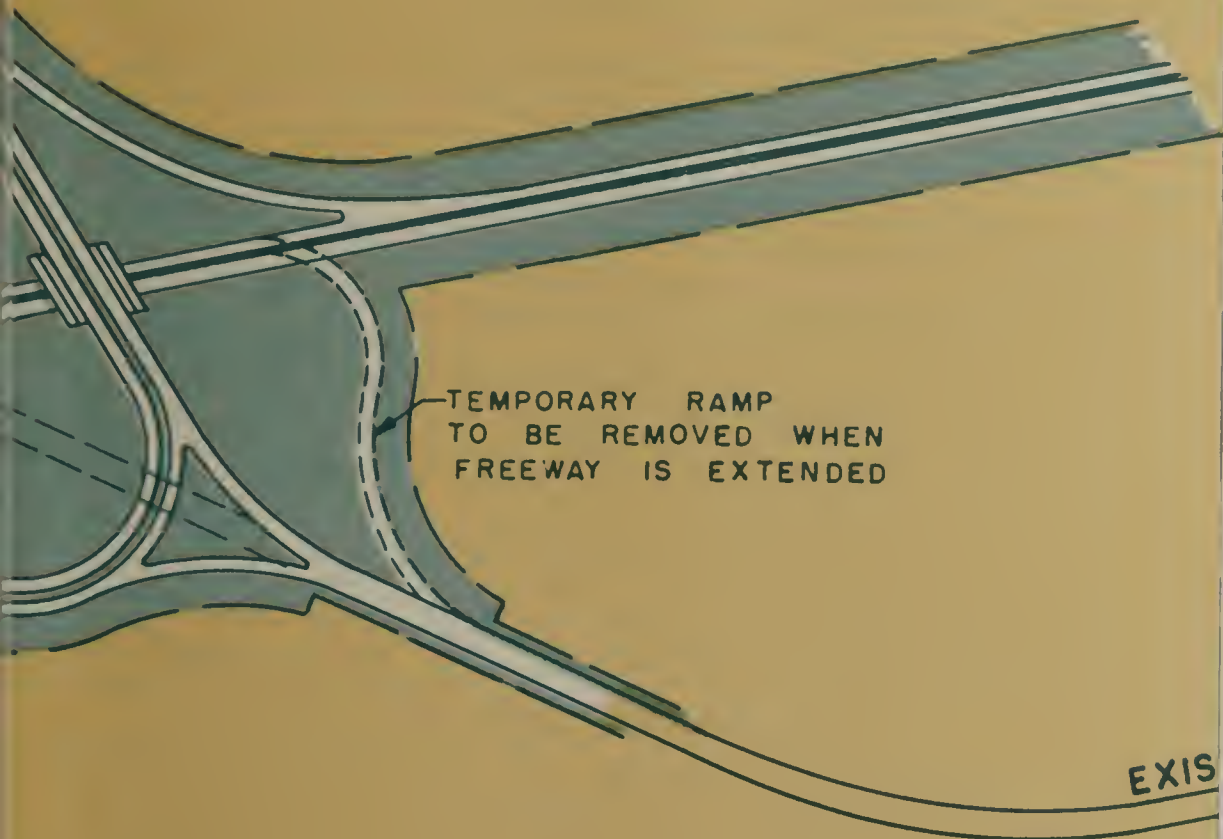
4 THROUGH LANES  
2 PARKING LANES  
TO 33 RD ST.





ST. CLAIR AVENUE IMPROVEMENTS  
EAST ST. LOUIS

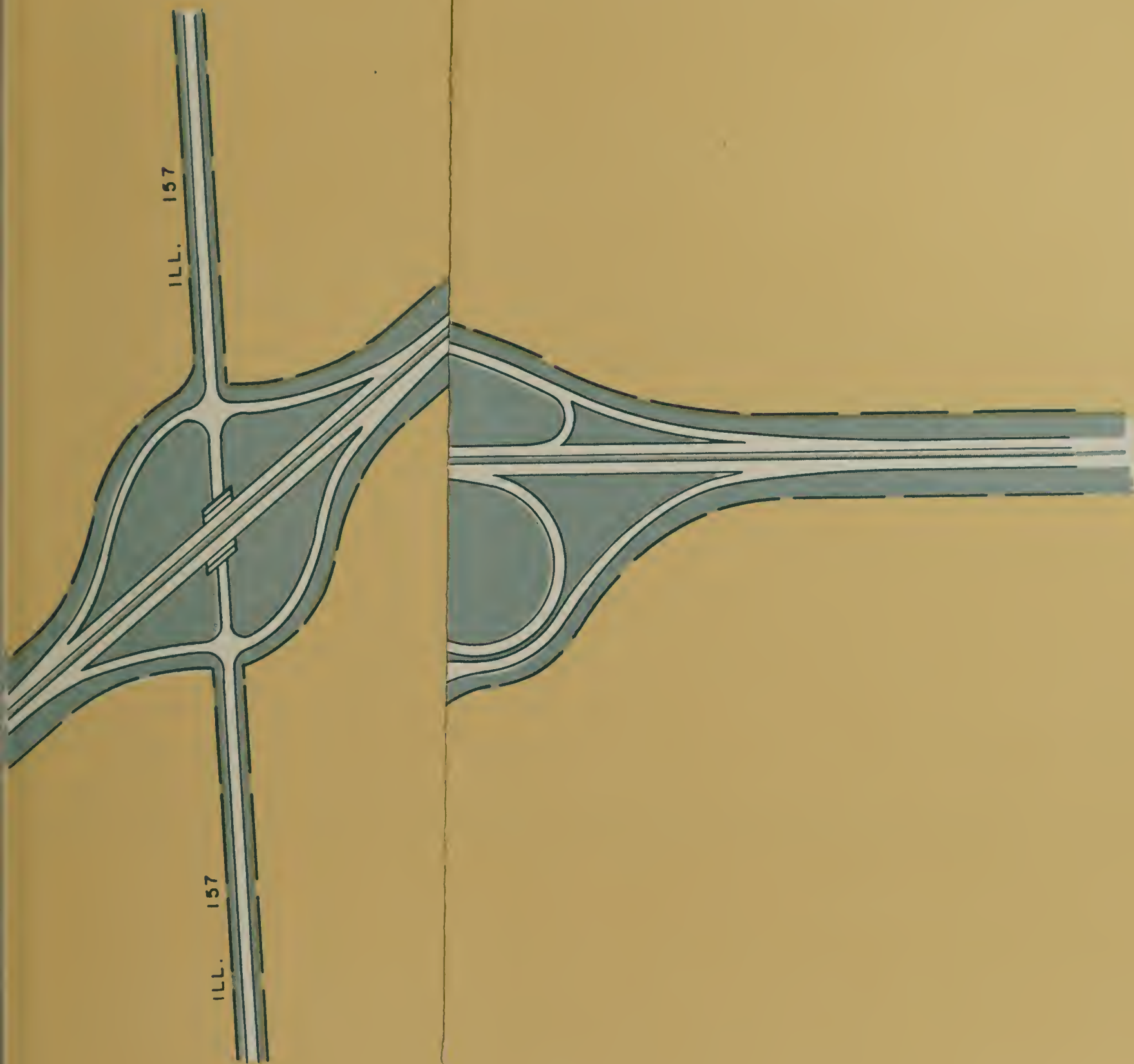










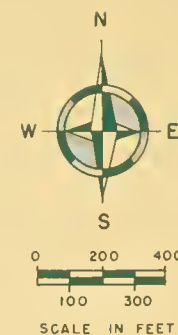


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